

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

IN THE MATTER OF
GOWANUS CANAL SUPERFUND SITE

Benson Metal Corp. and
539 Smith Street Realty Corp.,

Respondents.

Proceeding under Sections 106(a)
and 122 of the Comprehensive
Environmental Response,
Compensation, and Liability Act
of 1980, as amended, 42 U.S.C.
§§ 9606(a) and 9622.

Index Number
CERCLA-02-2013-2023

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT
FOR A REMOVAL ACTION

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (the "Settlement Agreement") is entered into voluntarily by Benson Metal Corp. and 539 Smith Street Realty Corp. ("Respondents") and the United States Environmental Protection Agency, Region II ("EPA") and requires Respondents to perform a removal action and pay certain response costs in connection with the Gowanus Canal Superfund Site located in Brooklyn, Kings County, New York.

2. This Settlement Agreement is issued to Respondents by EPA pursuant to the authority vested in the President of the United States under Section 106(a) and 122(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9606(a) and 9622(a), and delegated to the Administrator of EPA on January 23, 1987, by Executive Order No. 12580 (52 Fed. Reg. 2926, January 29, 1987). This authority was further delegated to the EPA Regional Administrators by EPA Delegation Nos. 14-14-C and 14-14-D and redelegated within Region II to the Director of the Emergency

and Remedial Response Division by Regional Order No. R-1200, dated November 23, 2004.

3. Respondents' participation in this Settlement Agreement shall neither constitute nor be construed as an admission of liability or an admission of the Findings of Fact or Conclusions of Law contained in this Settlement Agreement. To effectuate the mutual objectives of EPA and Respondents, Respondents agree to comply with and be bound by the terms of this Settlement Agreement. Respondents agree not to contest the authority or jurisdiction of the Director of the Emergency and Remedial Response Division or his delegate to issue this Settlement Agreement, and further agree that they will not contest the validity of this Settlement Agreement or its terms in any proceeding to enforce the terms of this Settlement Agreement.

4. EPA has notified the State of New York (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and Respondents and their successors and assigns. Any change in the ownership or corporate status of any Respondents, including, but not limited to, any transfer of assets or real or personal property, shall not alter the responsibilities of Respondents under this Settlement Agreement.

6. Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement. In the event of the insolvency or other failure of a Respondent to implement the requirements of this Settlement Agreement, the remaining Respondent shall complete all such requirements.

III. DEFINITIONS

7. Unless otherwise expressly provided herein, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or its implementing regulations. Whenever terms listed below are used in this Settlement Agreement or in an attachment to this Settlement Agreement, the following definitions shall apply:

- a. "Day" means a calendar day unless otherwise expressly stated. "Working Day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business on the next working day.
- b. "Effective Date" means the date specified in Paragraph 110.
- c. "Party" or "Parties" means EPA and/or Respondents.
- d. "Property" means 543 Smith Street, Kings County, Brooklyn, NY, which is identified on the Kings County Tax Map as Block 483, Lot 20.
- e. "Respondents" shall mean Benson Metal Corp. and 539 Smith Street Realty Corp.
- f. "Response Costs" means (a) all direct and indirect costs paid by EPA from August 1, 2013 through the Effective Date of this Settlement Agreement related to the Respondents' proposed Work and this Settlement Agreement; (b) all direct and indirect costs incurred by EPA in overseeing Respondents' implementation of the Work (defined below) until the date of EPA's written notification pursuant to Paragraph 107 of this Settlement Agreement that the Work has been completed; (c) all direct and indirect costs incurred by EPA in connection with obtaining access for Respondents in accordance with Paragraph 63, below; and (d) all other direct and indirect costs incurred by EPA in connection with the implementation of this Settlement Agreement.
- g. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, Index Number CERCLA-02-2013-2023, and all appendices attached hereto. In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.
- h. "Site" shall mean the Gowanus Canal Superfund Site, an approximately 100-foot wide, 1.8-mile-long canal located in the Borough of Brooklyn, Kings County, New York, any areas that are sources of contamination to the canal, and the Property.

i. "Waste" means (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any "pollutant or contaminant" under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6903(27); and (4) any mixture containing any of the constituents noted in (1), (2), or (3) above.

j. "Work" means all work and other activities that Respondents are required to perform pursuant to this Settlement Agreement.

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

8. The Gowanus Canal is a brackish, tidal arm of the New York-New Jersey Harbor Estuary, extending for approximately 1.8 miles through Brooklyn, New York. The approximately 100-foot-wide canal runs southwest from Butler Street to Gowanus Bay and Upper New York Bay. The adjacent waterfront is primarily commercial and industrial, currently including concrete plants, warehouses, and parking lots. The canal also borders several residential neighborhoods.

9. The canal was constructed by bulkheading and dredging a tidal creek and wetland. Following its completion in the late 1860s, the canal quickly became one of the nation's busiest industrial waterways, servicing heavy industries that included manufactured gas plants ("MGPs"), coal yards, cement manufacturers, tanneries, paint and ink factories, machine shops, chemical plants and oil refineries. As a result of the poor environmental practices typical of the era, large quantities of wastes from many of these operations were discharged directly into the canal. The canal served as an open sewer when it was initially constructed. By the late 1870s, sewers entering the canal carried a combination of household waste, industrial effluent from the MGPs and other industries and storm water runoff.

10. Historic and ongoing discharges to the canal have contained hazardous substances such as polycyclic aromatic hydrocarbons ("PAHs") (a semi-volatile organic compound), polychlorinated biphenyls ("PCBs"), pesticides, metals and volatile organic compounds ("VOCs"), causing the canal to become one of New York's most polluted waterways.

11. Much of the heavy industrial activity along the canal has ceased, although many upland areas adjacent to the canal remained zoned for industrial uses. Land uses along and near certain portions of the canal are in the process of transitioning from heavy industrial to light industrial, commercial, and residential. The canal is currently used by some for recreational purposes, such as boating, diving, and catching fish for consumption. The canal, Gowanus Bay and Upper New York Bay are subject to New York State fishing advisories.

12. At the request of the New York State Department of Environmental Conservation ("NYSDEC"), by publication in the *Federal Register* on April 8, 2009, EPA proposed the Site for inclusion on the National Priorities List ("NPL") established pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605. On March 2, 2010, EPA formally listed the Site on the NPL.

13. EPA conducted field work for a remedial investigation ("RI") between 2009 and 2010 and issued a draft RI report in January 2011. EPA's RI included sampling of various media, including canal sediment, surface water and groundwater and soil at properties along the canal thought to be the possible sources of ongoing contamination to the canal. The RI included human health and ecological risk assessments which found that canal sediments are affected by hazardous substances that are adsorbed to sediment particles and by the upwelling and horizontal transport of non-aqueous phase liquid, which contains PAHs. In surface sediments (0 to 6 inch depth interval), PAHs, PCBs and seven metals (barium, cadmium, copper, lead, mercury, nickel and silver) were found to be contributing to unacceptable ecological and human health risks. EPA issued a draft feasibility study ("FS") in December 2011 examining the potential methods of addressing the risk to human health and the environment.

14. EPA issued a proposed plan for the cleanup of the canal in December 2012. The comment period on the proposed plan ended on April 27, 2013. A Record of Decision ("ROD") is anticipated during 2013. All of the active remedial options in the FS report and set forth in the proposed plan include dredging of contaminated accumulated sediments in the canal and capping of contaminated native sediments. Temporary shoring of bulkheads will be necessary at the majority of parcels along the canal to prevent bulkhead collapse during dredging and capping operations. The temporary shoring would involve driving sheet

piling to depths greater than currently exist for the bulkheads along the canal.

15. In 2004, the U.S. Army Corps of Engineers ("USACE") issued a cultural resources report developed as part of its ecosystem restoration study pursuant to the Clean Water Act, which determined that the bulkheads were eligible for listing on the National Register of Historic Sites. Regarding historic preservation of the bulkheads, EPA's proposed plan indicates:

Should the bulkheads be subject to adverse effects as a result of cleanup actions, a wide range of mitigating measures could be implemented as part of the remedy. As noted above, the appropriate measures would likely include additional documentation of bulkhead characteristics and the incorporation of archaeological and architectural investigations. Where new bulkhead construction is required, bulkhead configurations that are in keeping with the historic character of the setting would be considered.

16. Due to the original timber crib bulkhead construction, repair and upgrade options are limited. Typical repairs and upgrades involve installation of new sheet piling along the existing bulkhead face, resulting in incremental encroachment on the canal. NYSDEC seeks to limit and mitigate such encroachment when approving such repairs and upgrades along the canal. EPA's proposed plan contemplates creation of a wetlands mitigation bank for off-setting such encroachment when it cannot be accomplished at the parcel in question. Such a wetlands mitigation bank could be achieved in the final remedy by means of the excavation and restoration of the contaminated, filled-in former 1st Street Basin.

17. Respondent 539 Smith Street Realty Corp. currently owns the Property, which was purchased in 1997. The Property has previously been utilized as a coal yard, a brick yard, salt storage, parking and open storage.

18. Respondent Benson Metal Corp. is the current operator of a metal recycling operation at the Property. Benson Metal Corp.'s operations include regular use of the Property bulkhead for material transfer to barges. The bulkhead at the Property was in poor condition. In September 2012, Respondents submitted to EPA a draft bulkhead repair design which would extend the

bulkhead to the depths necessary for EPA's potential dredging. Respondents then performed geotechnical borings at the proposed bulkhead installation location to confirm that the bulkhead could be properly installed. The Bulkhead Design was approved by EPA in December 2012, and is attached hereto as Appendix A.

19. Prior to the planned implementation of the bulkhead work, a bulkhead collapse occurred at the Property sometime between Sunday night, August 4, 2013 and Monday morning, August 5, 2013, involving the partial collapse of 120 feet of bulkhead into the canal. The exact cause of the collapse has not yet been determined. Following a NYSDEC August 6, 2013 inspection of the situation, at EPA's request, Respondents' contractor submitted to EPA a Bulkhead Collapse Report dated August 7, 2013 describing the steps needed to stabilize the bulkhead and remove debris blocking the navigation channel. EPA inspected the Property on August 7, 2013. EPA has determined that the conditions of the Property require immediate stabilization and repair to prevent further collapse. By letter dated August 8, 2013, EPA approved the Bulkhead Collapse Report. The Bulkhead Collapse Report and EPA's approval letter are attached as Appendix B.

20. In the event that the dredging depths contained in the proposed plan are incorporated into the ROD, EPA has determined that the depth specified in Respondents' bulkhead design would be sufficient to eliminate the need for installation and removal of temporary sheet piling at the Property, thereby reducing future remedy implementation time and costs and reducing barge-related business interruption impacts to Respondents. Respondents' proposed bulkhead repair work at the Property may create contaminant re-suspension for which controls would be needed. Respondents' bulkhead repairs will result in an estimated area of encroachment on the canal of 140 square feet. If the selected remedy includes restoration of the 1st Street basin, mitigation of encroachment from the Work will occur at the 1st Street Basin.

21. The Work is a response action which will be conducted entirely on-Site and is therefore subject to the permit exemption in Section 121(e)(1) of CERCLA, 42 U.S.C. § 9621(e)(1), and the provisions of National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. Part 300. EPA intends to coordinate with the appropriate regulatory

authorities, which include the USACE, the NYSDEC, New York City Department of Small Business Services and the New York State Historic Preservation Office ("SHPO") in order to ensure substantive compliance with the applicable regulatory requirements for such bulkhead work.

22. The PAHs, PCBs and metals in the sediments at the Site are "hazardous substances" within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14). Unless appropriately remediated to eliminate pathways, exposure to the hazardous substances present at the Site can potentially cause adverse effects to human health and the environment.

23. The Site, which includes the Property, constitutes a "facility" within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

24. Respondent 539 Smith Street Realty Corp. is a limited liability corporation incorporated in the State of New York. Respondent Benson Metal Corp. is a corporation incorporated in the State of New York. Each Respondent is "person" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

25. The presence of hazardous substances in sediments at the Site constitute a "release" or threat of "release" of a hazardous substances into the environment, as the term "release" is defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

26. Respondents have been given the opportunity to discuss with EPA the basis for issuance of this Settlement Agreement and its terms.

V. DETERMINATIONS

27. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon factors set forth in Section 300.415(b)(2) of the NCP. These factors include, but are not limited to, the following conditions:

- a. Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants; and

- b. the unavailability of other appropriate federal or state response mechanisms to respond to the release.

28. EPA has determined that a removal action is necessary to address the release or threat of release of hazardous substances, pollutants or contaminants at the Site.

29. The actions required by this Settlement Agreement are necessary to protect the public health or welfare or the environment, are in the public interest, and, if carried out in compliance with the terms of this Settlement Agreement, will be considered to be consistent with the NCP.

30. Based upon the Findings of Fact and Conclusions of Law set forth above, and the administrative record supporting this removal action, EPA has determined that the actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a), and it is hereby agreed and ordered that Respondents shall undertake a removal action at the Site, as set forth in Section VI (Work To Be Performed), below.

VI. WORK TO BE PERFORMED

A. Designation Of Contractor and Designated Project Coordinator

31. Respondents' approved Project Coordinator is:

Kenneth Huber, PE¹
Project Manager
Langan Engineering and Environmental
Services, Inc.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-2727
212.479.5415
khuber@Langan.com

¹ NY License Pending, Langan is authorized to offer professional engineering services in NY.

In the event that Respondents change their Project Coordinator, Respondents shall submit the name, address, qualifications, and telephone number of the Project Coordinator to the EPA Project Coordinator specified in Paragraph 46, below. The Project Coordinator shall be responsible on behalf of Respondents for oversight of the implementation of this Settlement Agreement. The Project Coordinator shall not be an attorney engaged in the practice of law. He or she shall have the technical expertise sufficient to adequately oversee all aspects of the Work contemplated by this Settlement Agreement. Respondents shall ensure that all Work requiring certification by a professional engineer licensed in the State of New York shall be reviewed and certified by such. The Project Coordinator shall be knowledgeable at all times about all matters relating to the Work being performed under this Settlement Agreement.

32. Selection of the Project Coordinator shall be subject to approval by EPA in writing. If EPA disapproves a proposed Project Coordinator, Respondents shall propose a different person and notify EPA of that person's name, address, telephone number and qualifications within seven (7) days following EPA's disapproval. Respondents may change their Project Coordinator provided that EPA has received written notice at least seven (7) days prior to the desired change. All changes of the Project Coordinator shall be subject to EPA approval.

33. EPA correspondence related to this Settlement Agreement will be sent to the Project Coordinator on behalf of Respondents. To the extent possible, the Project Coordinator shall be present on-Site or readily available for EPA to contact during all working days and be retained by Respondents at all times until EPA issues a notice of completion of the Work in accordance with Paragraph 107. Notice by EPA in writing to the Project Coordinator shall be deemed notice to Respondents for all matters relating to the Work under this Settlement Agreement and shall be deemed effective upon receipt.

34. All activities required of Respondents under the terms of this Settlement Agreement shall be performed only by well-qualified persons possessing all necessary permits, licenses, and other authorizations required by federal, state, and/or local governments consistent with Section 121 of CERCLA, 42 U.S.C. § 9621, and all Work conducted pursuant to this

35. Respondents shall retain at least one contractor to perform the Work. Respondents shall notify EPA of the name and qualifications of the proposed contractor within ten (10) days of the effective date of this Settlement Agreement. If said contractor is a prime or supervising contractor, Respondents shall notify EPA of the name and qualifications of other contractor(s) or subcontractor(s) proposed to perform Work under this Settlement Agreement at least ten (10) days prior to commencement of such Work.

36. EPA retains the right to disapprove of any, or all, of the contractor(s) and/or subcontractor(s) proposed by Respondents to conduct the Work. If EPA disapproves in writing of any of Respondents' proposed contractor(s) and/or subcontractor(s) to conduct the Work, Respondents shall propose a different contractor(s) and/or subcontractor(s) within seven (7) days of receipt of EPA's disapproval.

37. Respondents shall provide a copy of this Settlement Agreement to each contractor and subcontractor retained to perform the Work required by this Settlement Agreement. Respondents shall include in all contracts or subcontracts entered into for Work required under this Settlement Agreement provisions stating that such contractors or subcontractors, including their agents and employees, shall perform activities required by such contracts or subcontracts in compliance with this Settlement Agreement and all applicable laws and regulations. Respondents shall be responsible for ensuring that their contractors and subcontractors perform the Work contemplated herein in accordance with this Settlement Agreement.

B. Description of Work

38. Respondents shall perform, at a minimum, all actions necessary to implement the Work set forth in this paragraph.

Respondents shall immediately commence removal of the collapsed bulkhead debris and stabilization of the Property in accordance with the EPA-approved August 8, 2013 Bulkhead Collapse Report.

Respondents shall take all steps necessary to begin construction of the replacement bulkhead as soon as possible and complete the

Work within four (4) months. The actions to be implemented include, but may not be limited to, the following:

- a. Installation of a new bulkhead pursuant to the bulkhead design, attached hereto, which shall comply with the relevant substantive permit requirements for the USACE, NYSDEC, SHPO and the New York City Department of Small Business Services;
- b. Appropriate measures for controlling sediment re-suspension during bulkhead installation;
- c. Documentation of the existing historic bulkhead pursuant to an EPA-approved cultural resources work plan;
- d. Such other investigations, studies, and response actions as Respondents may propose and EPA may approve in accordance with this Settlement Agreement.

39. Within thirty (30) days of the Effective Date of this Settlement Agreement, Respondents shall submit to EPA for review and approval a detailed Bulkhead Work Plan ("BWP") for the Work set forth in Paragraph 38 in accordance with this Settlement Agreement, CERCLA, the NCP, EPA's relevant guidance documents and other applicable federal and state laws and regulations.

40. The BWP shall include a Health and Safety Plan, which shall ensure the protection of the public health and safety during performance of on-Site Work under this Settlement Agreement. This plan shall be prepared in accordance with the "EPA Standard Operating Safety Guide" (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. The plan shall also include contingency planning. Respondents shall incorporate all changes to the plan required by EPA and shall implement the plan during the duration of the removal action. The Health and Safety Plan, as appropriate, shall address the following:

- a. Delineation of the work zones;
- b. Personnel monitoring requirements, paying particular attention to monitoring specific job functions in

- compliance with OSHA requirements;
- c. Personal protective equipment requirements and upgrade thresholds based on real-time air monitoring;
- d. Demonstration that all personnel, including subcontractor personnel, have current certifications as per applicable OSHA regulations; and
- e. Decontamination procedures for personnel and equipment exiting any hot zone.

If the performance of any subsequent phase of the work required by this Settlement Agreement requires alteration of the Health and Safety Plan, Respondents shall submit to EPA for review and approval proposed amendments to the Health and Safety Plan.

41. EPA either will approve the BWP, or will require modifications thereto pursuant to Section VII (Plans and Reports Requiring EPA Approval), below. Upon its approval by EPA, the BWP shall be deemed to be incorporated into and an enforceable part of this Settlement Agreement.

42. Within five (5) days after EPA's approval of the BWP, Respondents shall commence the Work described in the EPA-approved BWP. Respondents shall fully implement the EPA-approved BWP in accordance with the terms and schedule therein and in accordance with this Settlement Agreement.

43. Upon request by EPA, Respondents shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondents while performing Work under this Settlement Agreement. Respondents shall notify EPA not less than seven (7) days in advance of any sample collection activity.

44. At the time of completion of all field activities required by this Settlement Agreement, demobilization shall include sampling if deemed necessary by EPA, and proper disposal or decontamination of protective clothing, remaining laboratory samples taken pursuant to this Settlement Agreement, and any equipment or structures constructed to facilitate the cleanup.

45. Respondents shall conduct the Work required hereunder in accordance with CERCLA and the NCP, and in addition to guidance documents referenced above, the following guidance documents: *EPA Region 2's "Clean and Green Policy"* which may be found at <http://epa.gov/region2/superfund/greenremediation/policy.html>, and Guide to Management of Investigation-Derived Wastes (OSWER Publication 9345.3-03FS, January 1992), as they may be amended or modified by EPA.

C. EPA Project Coordinator, Other Personnel, and
Modifications to EPA-Approved BWP

46. The current EPA Project Coordinator for the Work is:

Christos Tsiamis
Remedial Project Manager
New York Remediation Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866
(212) 637-4257
tsiamis.christos@epa.gov

EPA will notify Respondents' Project Coordinator if EPA designates a different Project Coordinator for the Work.

47. The EPA Project Coordinator or his authorized representative will conduct oversight of the implementation of the Work. The EPA Project Coordinator shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other response action undertaken by EPA or Respondents at the Property consistent with this Settlement Agreement. Absence of the EPA Project Coordinator from the Property shall not be cause for stoppage of Work unless specifically directed by the EPA Project Coordinator.

48. As appropriate during the course of implementation of the actions required of Respondents pursuant to this Settlement Agreement, Respondents or their consultants or contractors, acting through the Project Coordinator, may confer with EPA concerning the required actions. Based upon new circumstances or new information not in the possession of EPA on the effective

date of this Settlement Agreement, the Project Coordinator may request, in writing, EPA approval of modification(s) to the EPA-approved BWP. Only modifications approved by EPA in writing shall be deemed effective. Upon approval by EPA, such modifications shall be deemed incorporated into this Settlement Agreement and shall be implemented by Respondents.

VII. PLANS AND REPORTS REQUIRING EPA APPROVAL

49. If EPA disapproves or otherwise requires any modifications to any plan, report or other item required to be submitted to EPA for approval pursuant to this Settlement Agreement, Respondents shall have fourteen (14) days from the receipt of notice of such disapproval or the required modifications to correct any deficiencies and resubmit the plan, report, or other written document to EPA for approval, unless a shorter or longer period is specified in the notice. Any notice of disapproval will include an explanation of why the plan, report, or other item is being disapproved. Respondents shall address each of the comments and resubmit the plan, report, or other item with the required changes within the time stated above. At such time as EPA determines that the plan, report, or other item is acceptable, EPA will transmit to Respondents a written statement to that effect.

50. If any plan, report, or other item required to be submitted to EPA for approval pursuant to this Settlement Agreement is disapproved by EPA, even after being resubmitted following Respondents' receipt of EPA's comments on the initial submittal, Respondents shall be deemed to be out of compliance with this Settlement Agreement. If any resubmitted plan, report, or other item, or portion thereof, is disapproved by EPA, EPA may again direct Respondents to make the necessary modifications thereto, and/or EPA may amend or develop the item(s) and recover the costs of doing so from Respondents. Respondents shall implement any such item(s) as amended or developed by EPA.

51. EPA shall be the final arbiter in any dispute regarding the sufficiency or acceptability of all documents submitted and all Work performed pursuant to this Settlement Agreement.

52. All plans, reports and other submittals required to be submitted to EPA pursuant to this Settlement Agreement, upon

approval by EPA, shall be deemed to be incorporated into and an enforceable part of this Settlement Agreement.

VIII. REPORTING AND NOTICE TO EPA

53. Respondents shall provide, via email to EPA's Project Coordinator, at least one (1) week advance notice of all field activities, and weekly progress reports, or such other frequency as approved by EPA's Project Coordinator, while Respondents are conducting field activities.

54. Respondents shall provide EPA with at least one (1) week advance notice of any change in the schedule.

55. The Final Report referred to in Paragraph 57, below, and other documents submitted by Respondents to EPA which purport to document Respondents' compliance with the terms of this Settlement Agreement shall be signed by a responsible official of Respondents or by the Project Coordinator designated pursuant to Paragraph 31. For purposes of this paragraph, a responsible official is an official who is in charge of a principal business function.

56. The BWP, the Final Report, and other documents required to be submitted to EPA under this Settlement Agreement shall be sent to the following addressees:

3 copies: Remedial Project Manager - Gowanus Canal Site
(1 bound, Emergency and Remedial Response Division
1 unbound, U.S. Environmental Protection Agency, Region 2
1 electronic) 290 Broadway, 20th Floor
New York, New York 10007-1866

1 copy: Chief, New York/Caribbean Superfund Branch
(electronic) Office of Regional Counsel
United States Environmental Protection Agency,
Region 2
290 Broadway, 17th Floor
New York, New York 10007-1866
Attn: Gowanus Canal Superfund Site Attorney

3 copies: Director, Division of Environmental Remediation
(2 unbound, N.Y.S. Department of Environmental Conservation
1 electronic) 625 Broadway, 12th Floor

Albany, New York 12233-7011
Attn: Gowanus Canal Superfund Site

2 copies: Regional Attorney, Region 2
(1 unbound, N.Y.S. Department of Environmental Conservation
1 electronic) Hunters Point Plaza
47-40 21st Street
Long Island City, New York 11101
Attn: Gowanus Canal Superfund Site

57. Within thirty (30) days after completion of the Work required by the BWP, Respondents shall submit for EPA review and approval a Final Report summarizing the actions taken to comply with this Settlement Agreement. The Final Report shall include, as applicable:

- a. A synopsis of all Work performed under this Settlement Agreement;
- b. A detailed description of all EPA-approved modifications to the BWP that occurred during Respondents' performance of the Work required under this Settlement Agreement;
- c. A listing of quantities and types of materials removed from the Property or handled at the Property;
- d. A discussion of removal and disposal options considered for those materials;
- e. A listing of the ultimate destination of those materials;
- f. A presentation of the analytical results of all sampling and analyses performed, including data and chain of custody records;
- g. Accompanying appendices containing all relevant documentation generated during the Work (e.g., manifests, bills of lading, invoices, bills, contracts, certificates of destruction and permits;
- h. An accounting of expenses incurred by Respondents in performing the Work; and

- i. The following certification signed by a person who supervised or directed the preparation of the Final Report:

"I certify that the information contained in and accompanying this document is true, accurate, and complete."

58. EPA either will approve the Final Report or will require modifications thereto pursuant to Paragraphs 49-52, above.

IX. OVERSIGHT

59. During the implementation of the requirements of this Settlement Agreement, Respondents and their contractor(s) and subcontractors shall be available for such conferences with EPA and inspections by EPA or its authorized representatives as EPA may determine are necessary to adequately oversee the Work being carried out or to be carried out by Respondents, including inspections at the Property.

60. Respondents and their employees, agents, contractor(s) and consultant(s) shall cooperate with EPA in its efforts to oversee Respondents' implementation of this Settlement Agreement.

X. COMMUNITY RELATIONS

61. Respondents shall cooperate with EPA in providing information relating to the Work required hereunder to the public. As requested by EPA, Respondents shall participate in the preparation of all appropriate information disseminated to the public; participate in public meetings that may be held or sponsored by EPA to explain activities at or concerning the Property; and provide a suitable location for public meetings, as needed.

XI. ACCESS TO PROPERTY AND INFORMATION

62. EPA, NYSDEC, and their designated representatives, including, but not limited to, employees, agents, contractor(s), and consultant(s) thereof, shall be permitted to observe the Work carried out pursuant to this Settlement Agreement. Respondents shall at all times permit EPA, NYSDEC, and their

designated representatives full access to and freedom of movement at the Property and any other premises where Work under this Settlement Agreement is to be performed for purposes of inspecting or observing Respondents' progress in implementing the requirements of this Settlement Agreement, verifying the information submitted to EPA by Respondents, conducting investigations relating to contamination at the Site, or for any other purpose EPA determines to be related to EPA oversight of the implementation of this Settlement Agreement.

63. In the event that action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain access agreements from the present owners within twenty (20) days of the Effective Date of this Settlement Agreement for purposes of implementing the requirements of this Settlement Agreement. Such agreements shall provide access not only for Respondents, but also for EPA and its designated representatives or agents, as well as NYSDEC and its designated representatives or agents. Such agreements shall specify that Respondents are not EPA's representative with respect to liability associated with Site activities. If such access agreements are not obtained by Respondents within the time period specified herein, Respondents shall immediately notify EPA of their failure to obtain access and shall include in that notification a summary of the steps Respondents have taken to attempt to obtain access. Subject to the United States' non-reviewable discretion, EPA may use its legal authorities to obtain access for Respondents, may perform those response actions with EPA contractors at the property in question, or may terminate the Settlement Agreement if Respondents cannot obtain access agreements. If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondents shall perform all other activities not requiring access to that property. Respondents shall integrate the results of any such tasks undertaken by EPA into their reports and deliverables.

64. Upon request, Respondents shall provide EPA with access to all records and documentation related to the conditions at the Site, hazardous substances found at or released from the Site, and the actions conducted pursuant to this Settlement Agreement except for those items, if any, subject to the attorney-client or attorney work product privileges. Nothing herein shall

preclude Respondents from asserting a business confidentiality claim pursuant to 40 C.F.R. Part 2, Subpart B. All data, information, and records created, maintained, or received by Respondents or their contractor(s) or consultant(s) in connection with implementation of the Work under this Settlement Agreement, including, but not limited to, contractual documents, invoices, receipts, work orders, and disposal records shall, without delay, be made available to EPA upon request, subject to the same privileges specified above in this paragraph. EPA shall be permitted to copy all such documents. Respondents shall submit to EPA upon receipt the results of all sampling or tests and all other technical data generated by Respondents or their contractor(s), or on Respondents' behalf, in connection with the implementation of this Settlement Agreement.

65. Notwithstanding any other provision of this Settlement Agreement, EPA hereby retains all of its information gathering, access, and inspection authority under CERCLA, RCRA, and any other applicable statutes or regulations.

XII. RECORD RETENTION, DOCUMENTATION, AVAILABILITY OF INFORMATION

66. Respondents shall preserve all documents and information relating to Work performed under this Settlement Agreement, or relating to Waste materials found on or released from the Site, for six (6) years after completion of the Work required by this Settlement Agreement. At the end of the six (6) year period, Respondents shall notify EPA at least thirty (30) days before any such document or information is destroyed that such documents and information are available for inspection. Upon request, Respondents shall provide EPA with the originals or copies of such documents and information.

67. All documents submitted by Respondents to EPA in the course of implementing this Settlement Agreement shall be available to the public unless identified as confidential by Respondents pursuant to 40 C.F.R. Part 2, Subpart B, and determined by EPA to merit treatment as confidential business information in accordance with applicable law. In addition, EPA may release all such documents to NYSDEC, and NYSDEC may make those documents available to the public unless Respondents conform with applicable New York law and regulations regarding confidentiality. Respondents shall not assert a claim of

confidentiality regarding any monitoring or hydrogeologic data, any information specified under Section 104(e)(7)(F) of CERCLA, or any other chemical, scientific, or engineering data relating to the Work performed hereunder.

XIII. OFF-SITE SHIPMENTS

68. All hazardous substances and pollutants or contaminants removed from the Property pursuant to this Settlement Agreement for off-Site treatment, storage, or disposal shall be treated, stored, or disposed of in compliance with (a) Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), (b) Section 300.440 of the NCP, (c) the Clean Air Act, 42 U.S.C. § 7401, *et seq.*, (d) RCRA, (e) the Toxic Substances Control Act, 15 U.S.C. § 2601, *et seq.*, and (f) all other applicable federal and state requirements.

69. If hazardous substances from the Site are to be shipped outside of New York State, Respondents shall provide prior notification of such Waste shipments in accordance with the EPA Memorandum entitled "Notification of Out-of-State Shipments of Superfund Site Wastes" (OSWER Directive 9330.2-07, September 14, 1989). At least five (5) Working Days prior to such Waste shipments, Respondents shall notify the environmental agency of the accepting state of the following: (a) the name and location of the facility to which the Wastes are to be shipped; (b) the type and quantity of Waste to be shipped; (c) the expected schedule for the Waste shipments; (d) the method of transportation and name of transporter; and (e) the treatment and/or disposal method of the Waste streams.

XIV. COMPLIANCE WITH OTHER LAWS

70. All actions required pursuant to this Settlement Agreement shall be performed in accordance with all applicable Federal and State laws and regulations except as provided in CERCLA § 121(e)(1), 42 U.S.C. § 9621(e)(1), and 40 C.F.R. § 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under Federal environmental or State environmental or facility siting laws. (See "Superfund Removal Procedures: Guidance on the Consideration of ARARs

During Removal Actions," OSWER Directive No. 9360.3-02, August 1991).

71. As provided in Section 121(e)(1) of CERCLA, 42 U.S.C. § 9621(e)(1), and the NCP, no permit shall be required for any portion of the Work required hereunder that is conducted entirely on-Site. Where any portion of the Work requires a federal or state permit or approval, Respondents shall submit timely applications and shall take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, nor shall it be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XV. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

72. Upon the occurrence of any event during performance of the Work required hereunder which, pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, requires reporting to the National Response Center, telephone number (800) 424-8802, Respondents shall immediately orally notify the Chief of the Response and Prevention Branch of the Emergency and Remedial Response Division of EPA, Region 2, at (732) 321-6656 of the incident or Site conditions. Respondents shall also submit a written report to EPA within seven (7) days after the onset of such an event, setting forth the events that occurred and the measures taken or to be taken, if any, to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. The reporting requirements of this paragraph are in addition to, not in lieu of, reporting under CERCLA Section 103, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

73. In the event of any action or occurrence during Respondents' performance of the requirements of this Settlement Agreement which causes or threatens to cause a release of a hazardous substance or which may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize the threat and shall immediately notify EPA as provided in the preceding paragraph. Respondents shall take such action in accordance with applicable provisions of this Settlement Agreement including, but not limited to, the Health and Safety

Plan. In the event that EPA determines that: (a) the activities performed pursuant to this Settlement Agreement; (b) significant changes in conditions at the Site; or (c) emergency circumstances occurring at the Property pose a threat to human health or the environment, EPA may direct Respondents to stop further implementation of any actions pursuant to this Settlement Agreement or to take other and further actions reasonably necessary to abate the threat.

74. Nothing in the preceding paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

XVI. REIMBURSEMENT OF COSTS

75. Respondents hereby agree to reimburse EPA for all Response Costs. EPA will periodically send billings to Respondents for Response Costs. The billings will be accompanied by a printout of cost data in EPA's financial management system. Respondents shall remit payment to EPA via electronic funds transfer ("EFT") within thirty (30) days of receipt of each such billing.

76. To effect payment via EFT, Respondents shall instruct their bank to remit payment in the required amount via EFT using the following information, or such other updated EFT information that EPA may subsequently provide to Respondents:

- . Amount of payment
- . Bank: **Federal Reserve Bank of New York**
- . Account code for Federal Reserve Bank account receiving the payment: **68010727**
- . Federal Reserve Bank ABA Routing Number: **021030004**
- . SWIFT Address: **FRNYUS33**
33 Liberty Street
New York, NY 10045
- . Field Tag 4200 of the Fedwire message should read:
D 68010727 Environmental Protection Agency
- . Name of remitter:
- . Settlement Agreement Index number: **CERCLA-02-2013-2023**
- . Site/spill identifier: **02-ZP**

At the time of payment, Respondents shall send notice via regular mail that such payment has been made to:

U.S. Environmental Protection Agency
Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, OH 45268

and via email to the following:

acctsreceivable.cinwd@epa.gov

tsiamis.christos@epa.gov

carr.brian@epa.gov

Such notices shall reference the date of the EFT, the payment amount, the name of the Site, the Settlement Agreement index number, and Respondents' names and addresses.

The total amount to be paid by Respondents pursuant to this paragraph shall be deposited into the Gowanus Canal Superfund Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

77. Respondents shall pay interest on any amounts overdue under Paragraph 75 above. Such interest shall begin to accrue on the first day that payment is overdue. Interest shall accrue at the rate of interest on investments of the Hazardous Substances Superfund, in accordance with Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

XVII. FORCE MAJEURE

78. "Force majeure," for purposes of this Settlement Agreement, is defined as any event arising from causes beyond the control of Respondents and of any entity controlling, controlled by, or under common control with Respondents, including their contractors and subcontractors, that delays the timely performance of any obligation under this Settlement Agreement notwithstanding Respondents' best efforts to avoid the delay. The requirement that Respondents exercise "best efforts to avoid

the delay" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event: (a) as it is occurring; and (b) following the potential force majeure event, such that the delay is minimized to the greatest extent practicable. Examples of events that are not force majeure events include, but are not limited to, increased costs or expenses of any Work to be performed under this Settlement Agreement or the financial difficulty of Respondents to perform such Work.

79. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a force majeure event, Respondents shall notify by telephone the EPA Project Coordinator or, in his absence, the Chief of the Central New York Remediation Section of the Emergency and Remedial Response Division of EPA Region II at 212-637-4288 within forty-eight (48) hours of when Respondents knew or should have known that the event might cause a delay. In addition, Respondents shall notify EPA in writing within seven (7) calendar days after the date when Respondents first become aware or should have become aware of the circumstances that may delay or prevent performance. Such written notice shall be accompanied by all available and pertinent documentation, including third-party correspondence, and shall contain the following: (a) a description of the circumstances, and Respondents' rationale for interpreting such circumstances as being beyond their control (should that be Respondents' claim); (b) the actions (including pertinent dates) that Respondents have taken and/or plan to take to minimize any delay; and (c) the date by which or the time period within which Respondents propose to complete the delayed activities. Such notification shall not relieve Respondents of any of their obligations under this Settlement Agreement. Respondents' failure to timely and properly notify EPA as required by this paragraph shall constitute a waiver of Respondents' right to claim an event of force majeure. The burden of proving that an event constituting a force majeure has occurred shall rest with Respondents.

80. If EPA determines that a delay in performance of a requirement under this Settlement Agreement is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by

EPA. Such an extension shall not alter Respondents' obligation to perform or complete other tasks required by the Settlement Agreement that are not directly affected by the force majeure. Respondents shall use their best efforts to avoid or minimize any delay or prevention of performance of their obligations under this Settlement Agreement.

XVIII. STIPULATED AND STATUTORY PENALTIES

81. If Respondents fail to comply with any of the requirements or time limits set forth in or established pursuant to this Settlement Agreement, and such failure is not excused under the terms of Paragraphs 78 through 80 above (Force Majeure), Respondents shall, upon demand by EPA, pay a stipulated penalty to EPA in the amount indicated below:

- a. For all requirements of this Settlement Agreement, other than the timely provision of progress reports required by Paragraph 53, stipulated penalties shall accrue in the amount of \$750 per day, per violation, for the first seven days of noncompliance, \$1,000 per day, per violation, for the 8th through 15th day of noncompliance, \$1,500 per day, per violation, for the 16th through 25th day of noncompliance, and \$3,000 per day, per violation, for the 26th day of noncompliance and beyond.
- b. For the progress reports required by Paragraph 53, stipulated penalties shall accrue in the amount of \$250 per day, per violation, for the first seven days of noncompliance, \$500 per day, per violation, for the 8th through 15th day of noncompliance, \$1,000 per day, per violation, for the 16th through 25th day of noncompliance, and \$2,000 per day, per violation, for the 26th day of noncompliance and beyond.

82. Any such penalty shall accrue as of the first day after the applicable deadline has passed and shall continue to accrue until the noncompliance is corrected or EPA notifies Respondents that it has determined that it will perform the tasks for which there is non-compliance. Such penalty shall be due and payable thirty (30) days following receipt of a written demand from EPA. Payment of any such penalty to EPA shall be made via EFT in accordance with the payment procedures in Paragraph 76 above, and note that payment is for a penalty. Respondents shall pay

interest on any amounts overdue under this paragraph. Such interest shall begin to accrue on the first day that the respective payment is overdue. Interest shall accrue at the rate of interest on investments of the Hazardous Substances Superfund, in accordance with Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

83. Even if violations are simultaneous, separate penalties shall accrue for separate violations of this Settlement Agreement. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether EPA has notified Respondents of a violation or act of noncompliance. The payment of penalties shall not alter in any way Respondents' obligation to complete the performance of the Work required under this Settlement Agreement.

84. Notwithstanding any other provision of this Settlement Agreement, failure of Respondents to comply with any provision of this Settlement Agreement may subject Respondents to civil penalties of up to thirty-seven thousand five hundred dollars (\$37,500) per violation per day, as provided in Sections 109 and 122(1) of CERCLA, 42 U.S.C. §§ 9609 and 9622(1), and the Debt Collection and Improvement Act of 1996 (see Civil Monetary Penalty Inflation Adjustment Rule, 74 Fed. Reg. 626 (January 7, 2009)), unless such failure to comply is excused by EPA under the terms of Paragraphs 78 through 80 above. Respondents may also be subject to punitive damages in an amount at least equal to but not more than three times the amount of any costs incurred by the United States as a result of such failure to comply with this Settlement Agreement, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondents violate this Settlement Agreement or any portion thereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Settlement Agreement pursuant to Section 106 and 122 of CERCLA, 42 U.S.C. §§ 9606 and 9622.

XIX. OTHER CLAIMS

85. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents or Respondents' employees, agents, contractors, or consultants in carrying out any action or activity pursuant to this

Settlement Agreement. The United States or EPA shall not be held out as or deemed a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

86. Except as expressly provided in Paragraph 99 (waiver against "de micromis" parties) and Section XXIII (Covenant Not to Sue by EPA), below, nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

87. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XX. INDEMNIFICATION

88. Respondents agree to indemnify, save, and hold harmless the United States, its agencies, departments, officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from or on account of acts or omissions of Respondents, their employees, officers, directors, agents, servants, receivers, trustees, successors, assigns, or any other persons acting on behalf of Respondents or under their control, as a result of the fulfillment or attempted fulfillment of the terms and conditions of this Settlement Agreement by Respondents.

89. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims

for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the Site, including but not limited to, claims on account of construction delays.

90. Further, Respondents agree to pay the United States all costs it incurs including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement.

XXI. INSURANCE

91. At least seven (7) days prior to commencing any Work at the Site, Respondents shall submit to EPA a certification that Respondents or their contractors and subcontractors have adequate insurance coverage or have indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondents pursuant to this Settlement Agreement. Respondents shall ensure that such insurance or indemnification is maintained for the duration of the Work required by this Settlement Agreement.

XXII. FINANCIAL ASSURANCE

92. Respondents shall demonstrate their ability to complete the Work required by this Settlement Agreement and to pay all claims that arise from the performance of the Work by obtaining and presenting to EPA within twenty (20) days of the effective date of this Settlement Agreement one of the following: (1) a performance bond; (2) a letter of credit; (3) a guarantee by a third party; or (4) internal financial information to allow EPA to determine that Respondents have sufficient assets available to perform the Work. Respondents shall demonstrate financial assurance in an amount no less than the estimated cost of the Work to be performed by Respondents under this Settlement Agreement. If EPA determines that the financial assurances submitted by Respondents pursuant to this paragraph are inadequate, Respondents shall, within fifteen (15) days after

receipt of notice of EPA's determination, obtain and present to EPA for approval additional financial assurances meeting the requirements of this paragraph.

XXIII. COVENANT NOT TO SUE BY EPA

93. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for performance of the Work and for recovery of Response Costs. This covenant not to sue shall take effect upon the Effective Date of this Settlement Agreement and is conditioned upon the complete and satisfactory performance by Respondents of all obligations under this Settlement Agreement, including, but not limited to, payment of Response Costs pursuant to Section XVI (Reimbursement of Costs), above. This covenant not to sue extends only to Respondents and does not extend to any other person.

XXIV. RESERVATION OF RIGHTS BY EPA

94. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Property or the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

95. The covenant not to sue set forth in Section XXIII (Covenant Not to Sue by EPA), above, does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

- a. Claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;
- b. Liability for costs not included within the definition of Response Costs;
- c. Liability for performance of response action other than the Work;
- d. Criminal liability;
- e. Liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. Liability arising from the past, present, or future disposal, release or threat of release of Waste outside of the Property; and
- g. Liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

96. Work Takeover. In the event EPA determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Costs incurred by EPA in performing the Work pursuant to this paragraph shall be considered Response Costs that Respondents shall pay pursuant to Section XVI (Reimbursement of Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXV. COVENANT NOT TO SUE BY RESPONDENTS

97. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Response

Costs, or this Settlement Agreement, including, but not limited to:

a. Any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. Any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the New York State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. Any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Site.

Except as provided in Paragraph 99 (Waiver of Claims), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 95 (b), (c), and (e)-(g), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

98. Nothing in this Settlement Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

99. Waiver of Claims. Respondents agree not to assert any claims and to waive all claims or causes of action that they may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Respondents with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances

contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

100. The waiver in Paragraph 99 shall not apply with respect to any defense, claim, or cause of action that Respondents may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against Respondents. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. That such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. That the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

XXVI. CONTRIBUTION PROTECTION AND RIGHTS

101. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Respondents are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Response Costs.

102. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondents have resolved its liability to the United

States for the Work performed under this Settlement Agreement and for Response Costs.

103. Except as provided in Section XXV (Covenant Not to Sue by Respondents), above, nothing in this Settlement Agreement precludes the United States or Respondents from asserting any claims, causes of action or demands against any persons not parties to this Settlement Agreement for indemnification, contribution or cost recovery. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that provide contribution protection to such persons.

XXVII. MODIFICATIONS

104. The EPA Project Coordinator may make modifications to any plan or schedule in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the EPA Project Coordinator's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the Parties.

105. If Respondents seek permission to deviate from any approved work plan or schedule, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving oral or written approval from the EPA Project Coordinator pursuant to Paragraph 104.

106. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVIII. TERMINATION AND SATISFACTION

107. Upon a determination by EPA (following its receipt of the Final Report referred to in Paragraph 57, above) that the Work required pursuant to this Settlement Agreement has been fully carried out in accordance with this Settlement Agreement, EPA will so notify Respondents in writing. Such notification shall not affect any continuing obligations of Respondents. If EPA determines that any removal activities have not been completed in accordance with this Settlement Agreement, EPA may so notify Respondents, provide a list of the deficiencies, and require that Respondents correct such deficiencies.

XXIX. SEVERABILITY/INTEGRATION/APPENDICES

108. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondents have sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondents shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

109. This Settlement Agreement and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

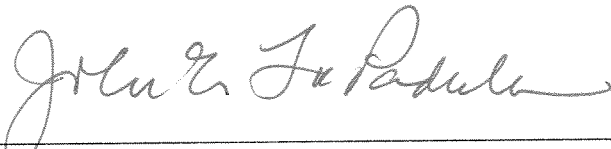
Appendix A - Bulkhead Design

Appendix B - August 7, 2013 Bulkhead Collapse Report and
August 8, 2013 EPA Approval Letter

XXX. EFFECTIVE DATE

110. This Settlement Agreement shall become effective on the date that EPA transmits a fully executed copy thereof via electronic mail to Respondents. All times for performance of actions or activities required herein will be calculated from said Effective Date.

U.S. ENVIRONMENTAL PROTECTION AGENCY



Walter E. Mugdan

Director

Emergency and Remedial Response Division

U.S. Environmental Protection Agency

Region II

8/16/13

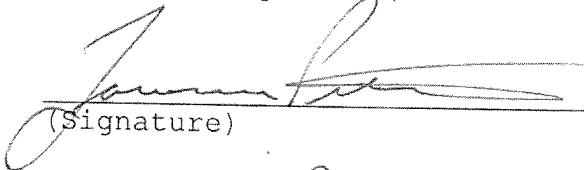
Date

In the Matter of the Gowanus Canal Site, EPA Index No. CERCLA-02-2013-200x

CONSENT

The Respondent named below has had an opportunity to confer with EPA to discuss the terms and the issuance of this Settlement Agreement. The Respondent hereby consents to the issuance of this Settlement Agreement and to its terms. Furthermore, the individual signing this Settlement Agreement on behalf of Respondent certifies that he or she is fully and legally authorized to agree to the terms and conditions of this Settlement Agreement and to bind Respondent.

Benson Metal Corp. and 539 Smith Street Realty Corp.
(Name of Respondent)


(Signature)

8/15/2013

(Date)

LAWRENCE PETROSENO
(Printed Name of Signatory)

Vice President _____
(Title of Signatory)

Appendix A – Bulkhead Design

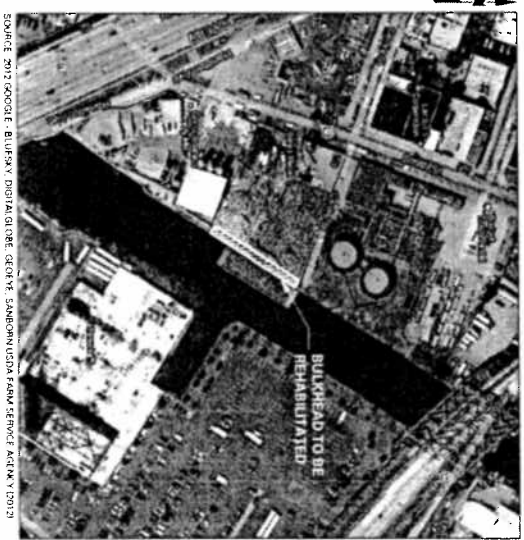
539 SMITH STREET BULKHEAD REHABILITATION
 IN
 BROOKLYN, NEW YORK
 PREPARED FOR
 BENSON SCRAP METAL
 PREPARED BY
 LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, Inc., P.C.

DRAWING LIST

DRAWING NO	TITLE
MA-000	COVER SHEET
MA-010	NOTES (1 OF 2)
MA-011	NOTES (2 OF 2)
MA-101	SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS
MA-102	DEMOLITION AND REMOVALS PLAN
MA-201	REPAIRS PLAN AND ELEVATION
MA-202	REPAIRS SECTION
MA-301	DETAILS (1 OF 3)
MA-302	DETAILS (2 OF 3)
MA-303	DETAILS (3 OF 3)



SITE LOCATION PLAN
 SCALE 1" = 500'



AERIAL MAP
 SCALE 1" = 100'

DATE	DESCRIPTION	BY
21 Beach Road Langan Engineering and Environmental Services, Inc. P.O. Box 1000 P.O. Box 1000 P.O. Box 1000 P.O. Box 1000		
539 SMITH STREET BULKHEAD REHABILITATION		
COVER SHEET		
Project No. 539-01 Scale AS SHOWN Date 10/12	Drawing No. MA-000	

[illegible]

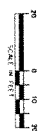
- NOTES:
1. REFER TO DRAWING NOS. MA-100 AND MA-101 FOR NOTES.
 2. BASE PLAN TAKEN FROM SITE OBSERVATIONS AND SURVEY SHEET, "SITE SURVEY, CHARLES F. MOULTON & SONS COUNTY BLOCK 481, TAX LOT 701, PERFORMED BY CHARLES F. MOULTON & SONS COUNTY BLOCK 481, TAX LOT 701, PERFORMED BY 23 FEBRUARY 2005."

LEGEND:

— TURBIDITY CURTAIN

— Silt FENCE

SOIL EROSION AND SEDIMENT CONTROL PLAN



SCALE: 1" = 20'
1" = 100'

GOVANUS CANAL

(LOCATION TO BE CORRELATED WITH EPA REGION SCRAP METAL AND SLOTTED ADJACENT PROPERTY OWNERS)

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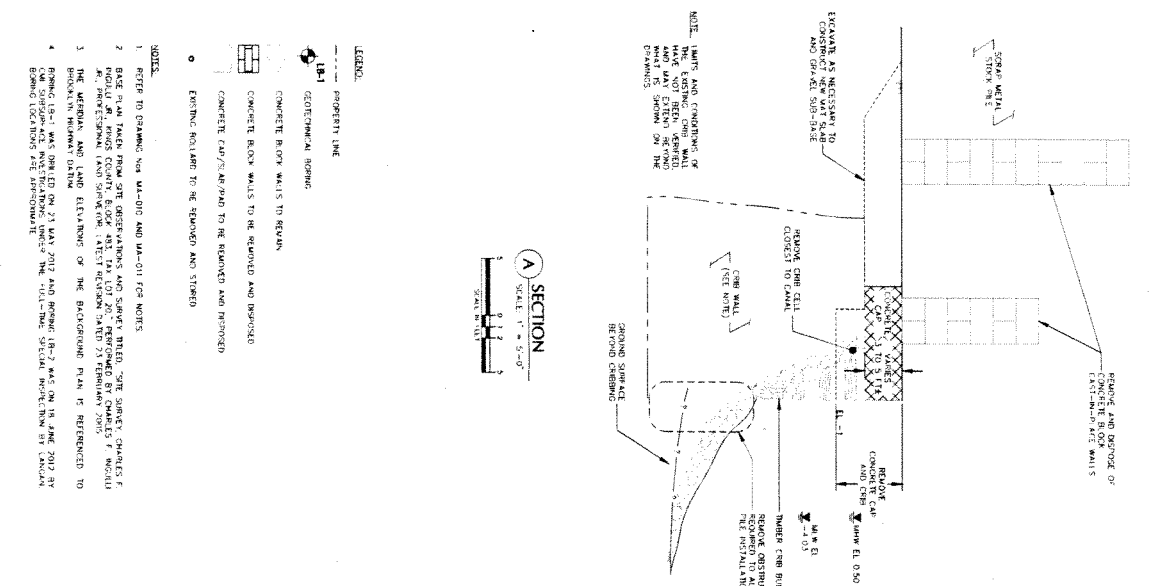
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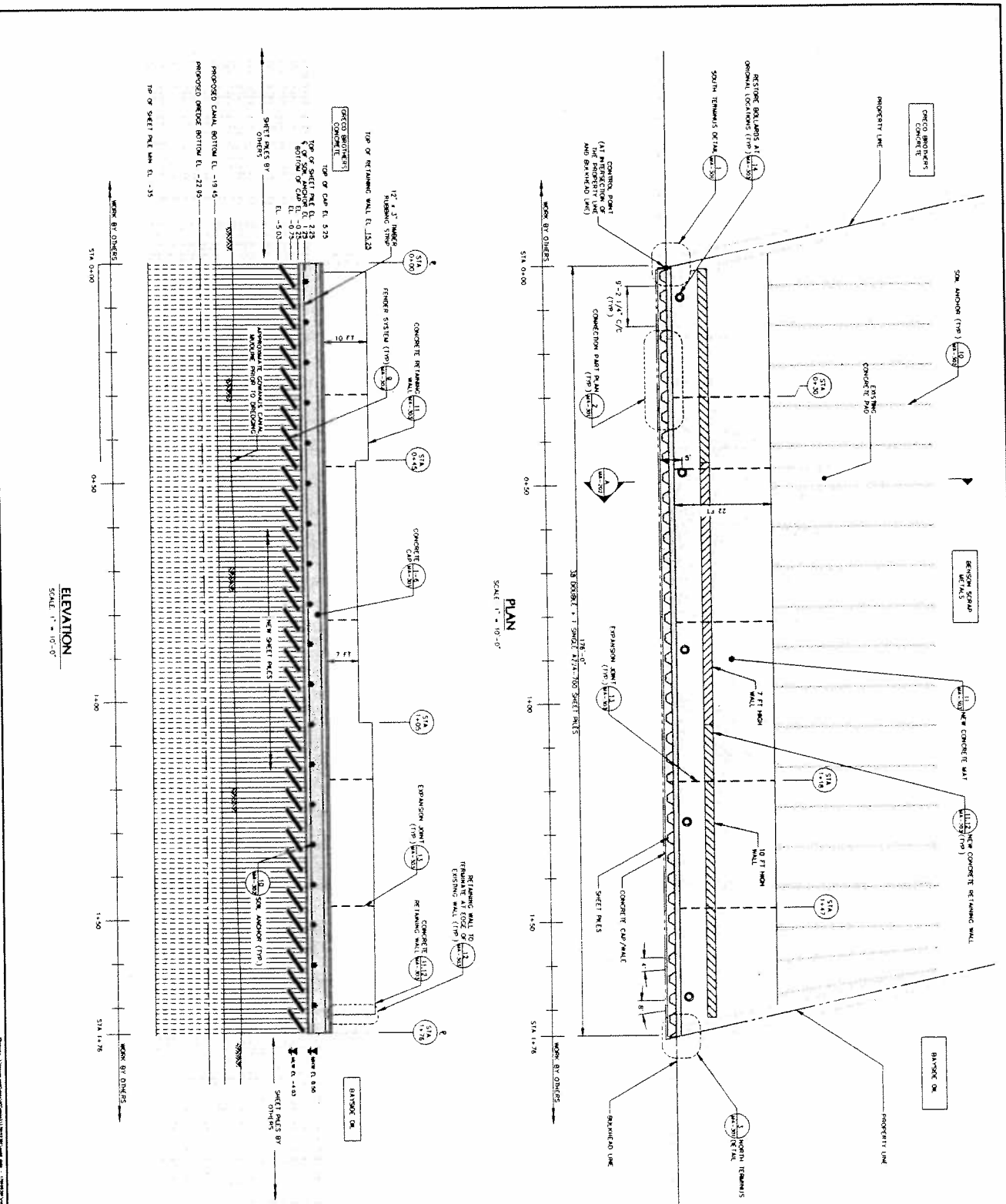
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- NOTES
1. REFER TO DRAWING NOS. MA-010 AND MA-011 FOR NOTES
 2. ELEVATIONS SHOWN ARE REFERENCED TO BRIDGELINE HIGHWAY DATUM

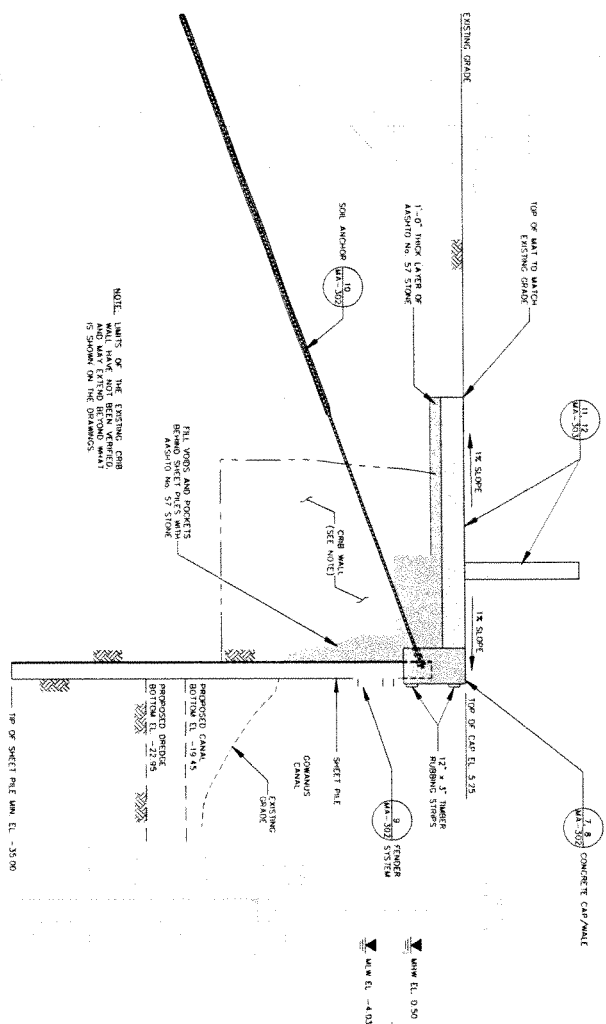
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1/1/00	REVISION	1

PROJECT NO.	MA-201
CONTRACT NO.	MA-201
SECTION	REPAIRS PLAN AND ELEVATION
DATE	1/1/00
BY	MA-201
CHECKED	MA-201
APPROVED	MA-201

EL LANGAN

2100 West 10th Street
 Suite 200
 Anchorage, Alaska 99503
 Phone: (907) 562-1100
 Fax: (907) 562-1101
 E-mail: elangan@elangan.com

**S39 SMITH STREET
 BULKHEAD
 REHABILITATION**



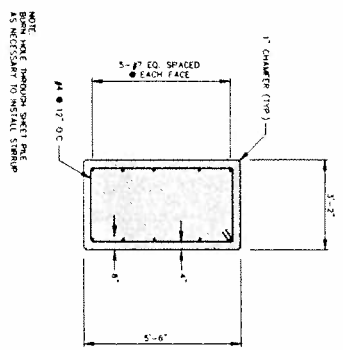
- NOTES:**
1. REFER TO DRAWING NOS. MA-010 AND MA-011 FOR NOTES.
 2. ELEVATIONS SHOWN ARE REFERENCED TO BROOKLYN HIGHWAY DATUM
 3. BROOKING, L.R.-1 WAS ORIENTED ON 23 MAY 2012 AND BROOKING, L.R.-2 WAS ON 18 JUNE 2012 BY CDM SUBSURFACE INVESTIGATIONS (BRIEF). THE TELL-TALE SPECIAL INSPECTION BY CANADIAN MINING, LOCALITIES ARE APPROXIMATE.

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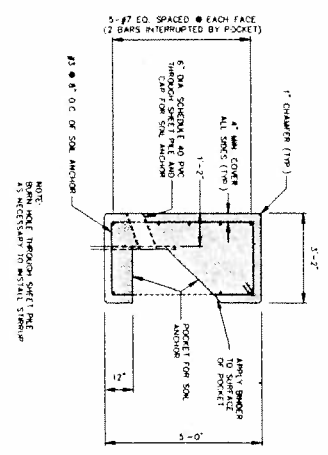
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○	SAND
□	CLAY
■	WOOD

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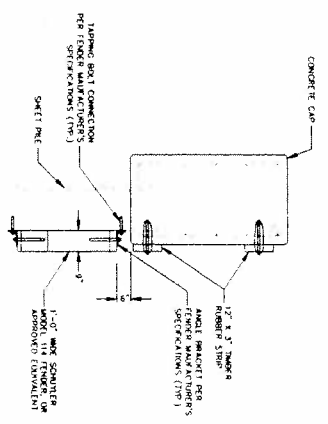
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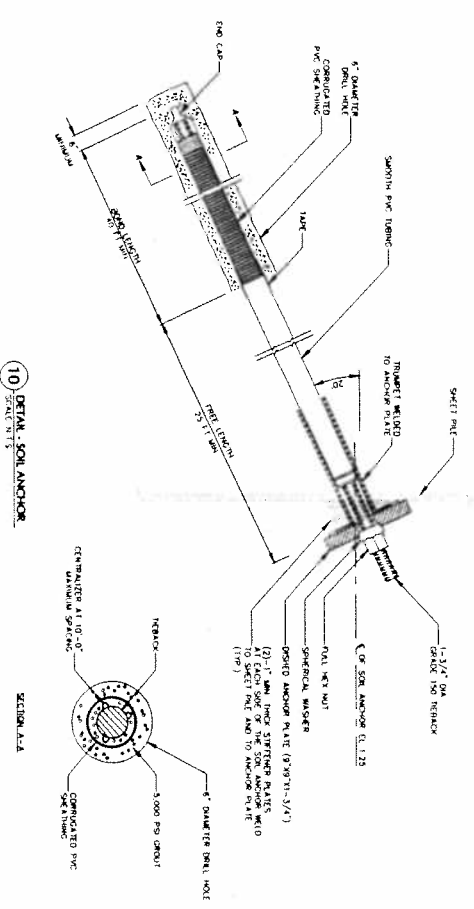
7 DETAIL - CAP (TYPICAL)
SCALE 1/2" = 1'-0"



8 DETAIL - CAP (AT SOIL ANCHOR)
SCALE: 1/4" = 1'-0"




9 DETAIL - FENDER
SCALE 1/2" = 1'-0"

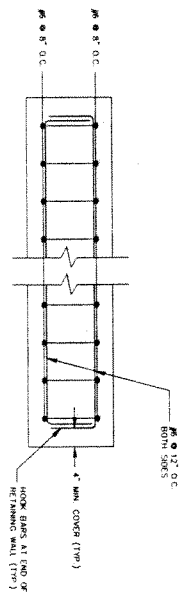
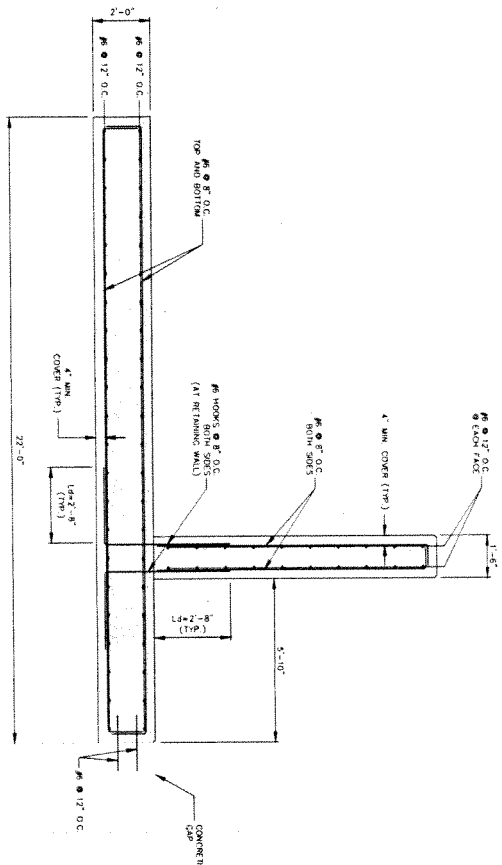


10 DETAIL - SOIL ANCHOR
SPECIAL NOTES

1 PREFER TO DRAWING NO. MA-019 AND MA-011 FOR NOTES

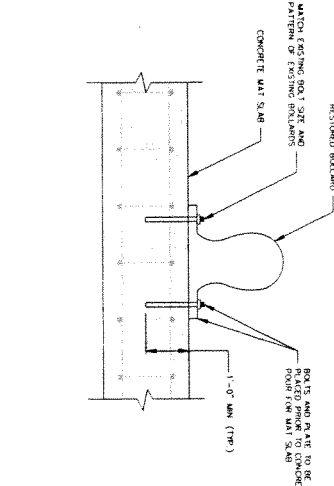
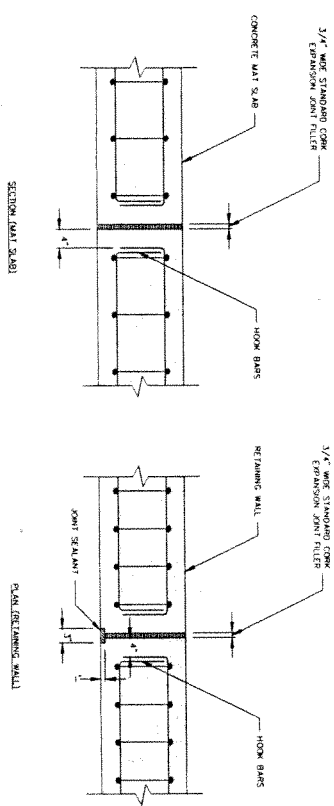


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539 SMITH STREET BULKHEAD REHABILITATION		
PROJECT NO. 17996132801 ORDER NO.		
ORDER NO. 17996132801 ORDER DATE		
DETAILS (2 OF 3)		
Project No. 17996132801	Order No.	
Code 0014	SYNOPSIS	
Code AS BROWN		
Qty 87	995	
Unit Pounds		
		9 01 10
MA-302		



11 DETAIL - RETAINING WALL (TYPICAL)
SCALE 1/4" = 1'-0"

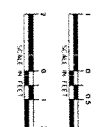
12 DETAIL - RETAINING WALL END CONDITION
SCALE 1/4" = 1'-0"



13 DETAIL - EXPANSION JOINT
SCALE 1/4" = 1'-0"

14 DETAIL - ROLLARD
SCALE 1/4" = 1'-0"

NOTES:
1. REFER TO DRAWING NOS. MA-010 AND MA-011 FOR NOTES.



DATE	DESCRIPTION	NO.
10/1/01	REVISION	1
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Appendix B – Bulkhead Collapse Report and EPA Approval Letter

7 August 2013

Mr. Christos Tsiamis
New York Remediation Branch
US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

**Re: Collapse of Existing Bulkhead
Benson Scrap Metal – Bulkhead Replacement
539 Smith Street, Brooklyn, NY
Langan Project No.: 170192301**

Dear Mr. Tsiamis:

This letter report documents our findings and recommendations following the collapse of a portion of the existing crib wall bulkhead along the Gowanus Canal at 539 Smith Street in Brooklyn, New York. This report includes a description of the site, a summary of the collapse and observed conditions, a discussion of the post-collapse conditions, and recommendations for immediate action.

At your request, this report was prepared by Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) on behalf of Benson Scrap Metal (Benson). Langan has been retained by Benson to design a new bulkhead at its Smith Street facility to accommodate future dredging activity proposed by the Environmental Protection Agency (EPA) in the Gowanus Canal.

SITE DESCRIPTION

The 539 Smith Street property in Brooklyn, New York, is bound by Bayside Fuel Oil Depot Corporation's fuel terminal on the north, Gowanus Canal on the east, Greco Brothers concrete ready mix plant on the south, and Smith Street on the west. A site location map is attached as Figure 1.

The property fronts about 176 ft of the western side of the Gowanus Canal between Hamilton Avenue and 9th Street. Benson operates a metal recycling facility on the property. Scrap metal is stockpiled on the site and loaded onto a barge moored alongside the bulkhead. The scrap

metal is stockpiled on the site in two piles typically with a reported height of up to 40 ft. The existing grade within the property is about el 6¹, excluding the height of the stockpiles.

Shoreline Protection Measures

The historic bulkhead at the eastern border of the site consisted of a timber crib structure with a concrete cap on top. The timber crib structure likely dates from the 19th Century and the concrete cap was likely added to replace deteriorated timber. The timber crib structure is anticipated to have at least one row of roughly square cells parallel to the bulkhead line constructed “log-cabin” style. Each cell is estimated to be about 7 ft per side. Timber floors were constructed within each cell to contain riprap fill. A concrete block wall about 6 ft high sits on the concrete cap and is set about 5 ft behind the face of the bulkhead. Another concrete block wall about 12 ft high is set about 16 ft behind the face of the bulkhead, immediately in front of the stockpiled scrap metal.

Langan previously conducted a visual inspection of the crib wall bulkhead on 20 April 2012. Our findings and recommendations were presented in a letter report, dated 4 May 2012. Advanced deterioration and localized failures of the bulkhead were observed during our inspection. Langan judged that the bulkhead was in need of immediate attention to address the structural deterioration that we observed. As such, Langan recommended (1) that the schedule for construction of a new bulkhead be accelerated, and (2) that several remedial measures be implemented until the bulkhead could be replaced, including:

- Moving the stockpile and concrete block wall to at least 16 ft behind the bulkhead;
- Constructing a reinforced concrete pad to spread the load of heavy equipment; and
- Re-supporting the cantilevered portions of the concrete cap and timber crib elements.

Langan designed an anchored sheet pile bulkhead to replace the historic crib wall bulkhead and accommodate future dredging activity as proposed by EPA to remediate contamination within the canal. Our construction plans were submitted to EPA on 7 September 2012 and were subsequently approved for construction. Benson and EPA have been working on a consent order to allow the construction of the proposed bulkhead to proceed.

DESCRIPTION OF COLLAPSE

Sometime between Sunday night, 4 August 2013, and Monday morning, 5 August 2013, a portion of the historic crib wall bulkhead at the eastern border of the site collapsed into the

¹ All elevations provided in this report have been estimated from an annotated topographic survey of the site prepared by Charles F. Ingulli Jr., last revised 23 February 2005, and are given in reference to the Brooklyn Highway Datum (BHD), which is 2.56 feet above the United States Geodetic Survey (USGS) National Geodetic Vertical Datum (NGVD), 1929 (Mean Sea Level at Sandy Hook, New Jersey, 1929).

Gowanus Canal. A barge had been loaded with scrap metal over the weekend and was left moored to the bollards embedded in the concrete cap of the bulkhead overnight on Sunday night. A representative of Benson observed the collapse on Monday morning when the scrap yard opened for business around 7:00 AM. Reportedly, as the tide receded and the elevation of the barge dropped, the ropes mooring the barge to the bulkhead pulled the bulkhead into the canal.

A Langan representative visited the site on Monday afternoon, 5 August 2013, at about low tide, to visually examine the collapsed portion of the bulkhead. Langan made a follow up visit on 6 August at about low tide. A brief description of conditions observed is provided below. Photographs documenting the observed conditions are provided in Appendix A. The approximate limits of the collapse and location of photographs are shown on the attached Figure 2.

The southern-most about 120 ft of crib wall bulkhead had collapsed into the canal. The collapsed portion includes the timber crib cells, the rubble fill formerly retained within the cribs, the concrete cap, and the 6-ft high concrete block retaining wall. The second concrete block wall (about 16 ft behind the former bulkhead) was not affected and the stockpiled scrap metal was retained on site. The width of the collapse is about 8 to 10 ft and extends to the rear timber of the first crib cell. Some of the longitudinal and transverse members of the timber cribbing are visible. The transverse timbers protrude from the escarpment and have been sheared off by the collapse. The material within the escarpment is miscellaneous soil fill. The angle of repose after the collapse is about 45° below horizontal. A typical section through the collapsed zone is illustrated in Figure 3.

The debris from the collapsed bulkhead is in the canal; the top of the debris is visible above water at low tide. The visible debris extends about 10 ft into the canal beyond the former face of bulkhead. The debris consists of timber cribbing, cobbles/boulders once retained by the cribbing, large sections of concrete cap, and concrete blocks (about 2 x 2 x 6 ft each) that once formed the concrete block wall on top of the cap. The debris is expected to extend about 20 to 25 ft into the canal beneath the water, however, the bottom of the debris was not visible at the time of our site visits. Benson has placed mooring balls (serving as buoys) in the canal to mark the approximate extent of the debris for watercraft.

Along the portion of the bulkhead that remains (about 55 ft long), localized voids were observed immediately beneath the concrete cap. A small void (about 2 ft by 3 ft) was observed immediately beneath the cap at the south end of the remaining bulkhead. The void was visible from the escarpment to the south. The concrete cap and concrete block wall on the remaining portion of the bulkhead are visibly leaning toward the canal. No tension cracks were visible behind the portion of the bulkhead that remains.

ENGINEERING DISCUSSION

The shoreline along the eastern border of the site is in need of immediate attention due to the collapse. The debris in the canal should be removed and the bulkhead replaced as soon as possible to minimize the potential for continued damage.

The escarpment within the collapsed portion of the bulkhead appeared to be marginally stable during our site visits, but there is a risk of future collapse with time. While the angle of repose is steeper than the friction angle of the fill, the longitudinal and transverse timbers from the former cribbing serve as a kind of reinforcement to the escarpment and the debris in the canal serves as a stabilizing berm at the toe of the slope. The slope is subject to repeated wetting and drying from the tide; however, and continued erosion of the slope is expected to occur over time.

The portion of the bulkhead that remains is still in need of immediate attention. The collapse of the southern portion of the bulkhead has reduced the stability of the portion that remains. Although no visible signs of slope failure were observed, we cannot determine how long the remaining portion of the bulkhead will remain stable.

The debris from the collapse extends into the navigable channel of the Gowanus Canal. Some of the debris lies below water and cannot be seen even at low tide. The debris includes large, angular pieces of concrete and rock that could damage passing vessels unaware its presence. Benson has marked the estimated limits of debris with buoys. Langan has also notified the US Coast Guard (USCG); USCG issued a notice to mariners of the obstructions in the canal.

RECOMMENDATIONS

Based on our observations, Langan recommends that the following measures be implemented immediately:

- 1) We respectfully request that the EPA expedite the process to authorize Benson to remove the debris from the canal and replace the bulkhead. Since the collapsed debris serves as a stabilizing berm at the toe of the escarpment, we recommend that debris removal and bulkhead replacement occur concurrently. This is an emergency situation requiring immediate action to return the shoreline to a stable condition.
- 2) While EPA is working on an expedited authorization and consent order, we recommend that immediate action be taken to stabilize the shoreline. Consideration should be given to remove the concrete cap and concrete block wall that remain, but further analysis is required. The escarpment should be cut back to a slope not steeper than 30° from horizontal. A turbidity curtain should be installed around the collapsed debris to capture eroded soils.

- 3) We have recommended to Benson that all equipment, scrap metal and personal be kept behind the concrete block retaining wall that remains (about 16 ft behind the former face of bulkhead). We understand that they are implementing these recommendations now.
- 4) We recommend that construction of the new bulkhead be expedited.

CLOSING

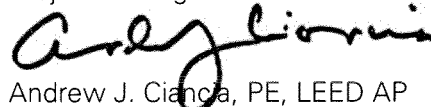
We trust that this report satisfies your request for a report of the bulkhead collapse and assessment of conditions. Let us know if you have any questions or if you need additional information to proceed.

Sincerely,

**Langan Engineering, Environmental, Surveying
and Landscape Architecture, D.P.C.**



Kenneth A. Huber
Project Manager



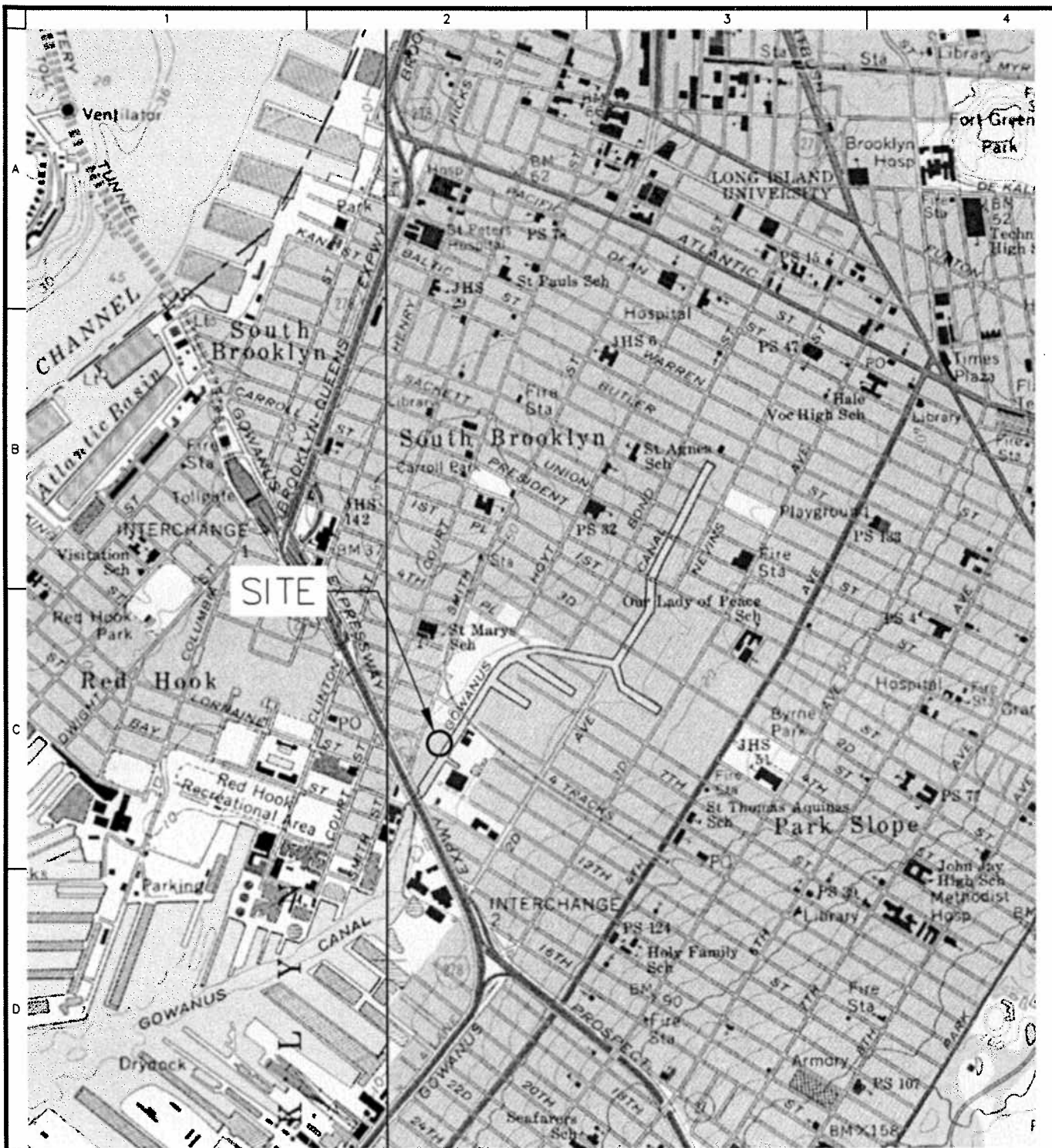
Andrew J. Ciancia, PE, LEED AP
NY Professional Engineer License No. 50161
Managing Principal

KAH:kah

Enclosure(s): Figure 1 – Site Location Map
Figure 2 – Observed Conditions and Photograph Location Plan
Figure 3 – Typical Section at Collapse
Appendix A - Photographs

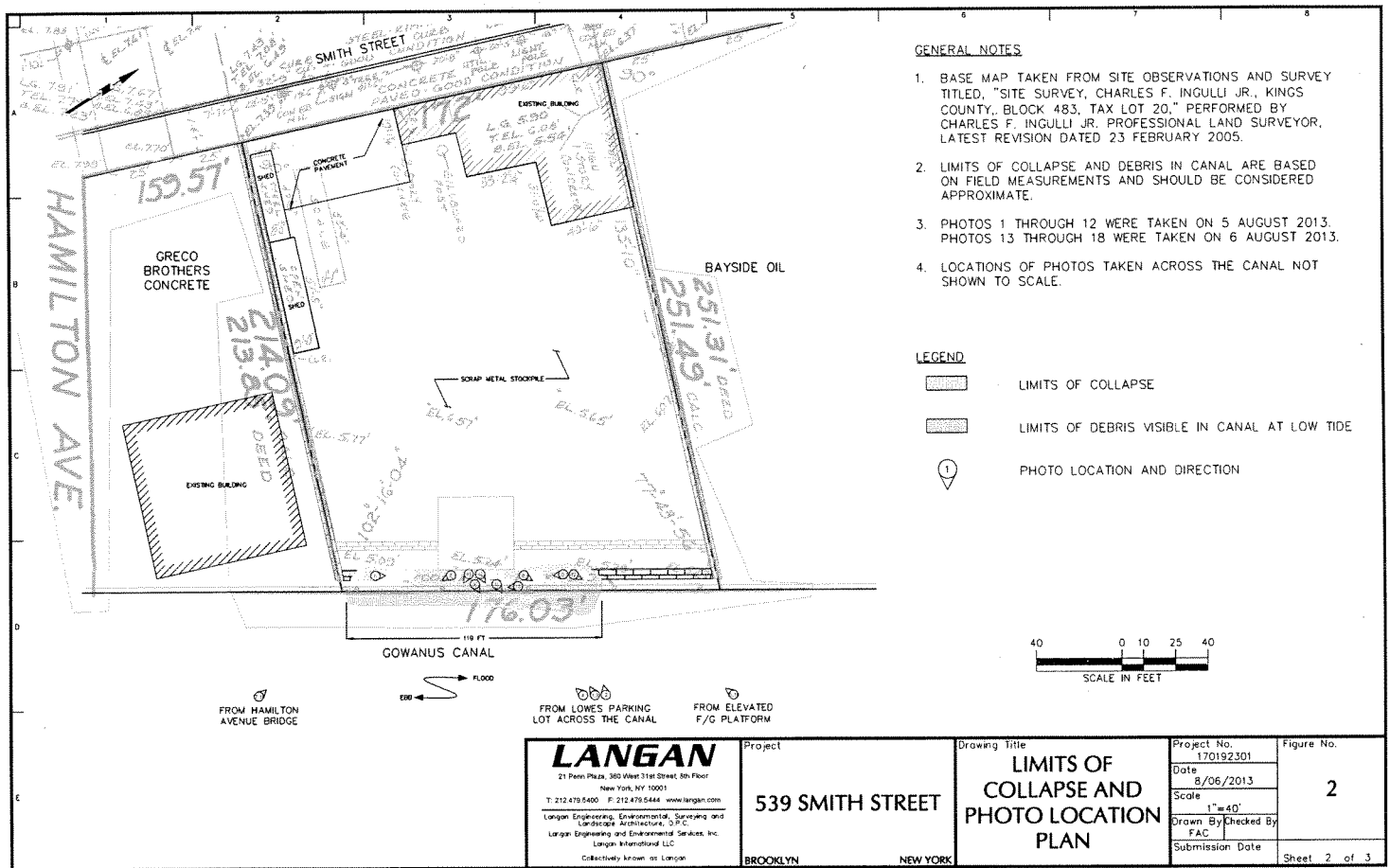
cc: Brian Carr (USEPA)
Udo Drescher (NYSDEC)
Michael Scarano (USACE)
Carlos Marcial (NYCSBS)
Paul Casowitz (Sive Paget & Riesel)
Larry Petrosino (Benson)
Gregory Biesiadecki, Joel Landes, file (Langan)

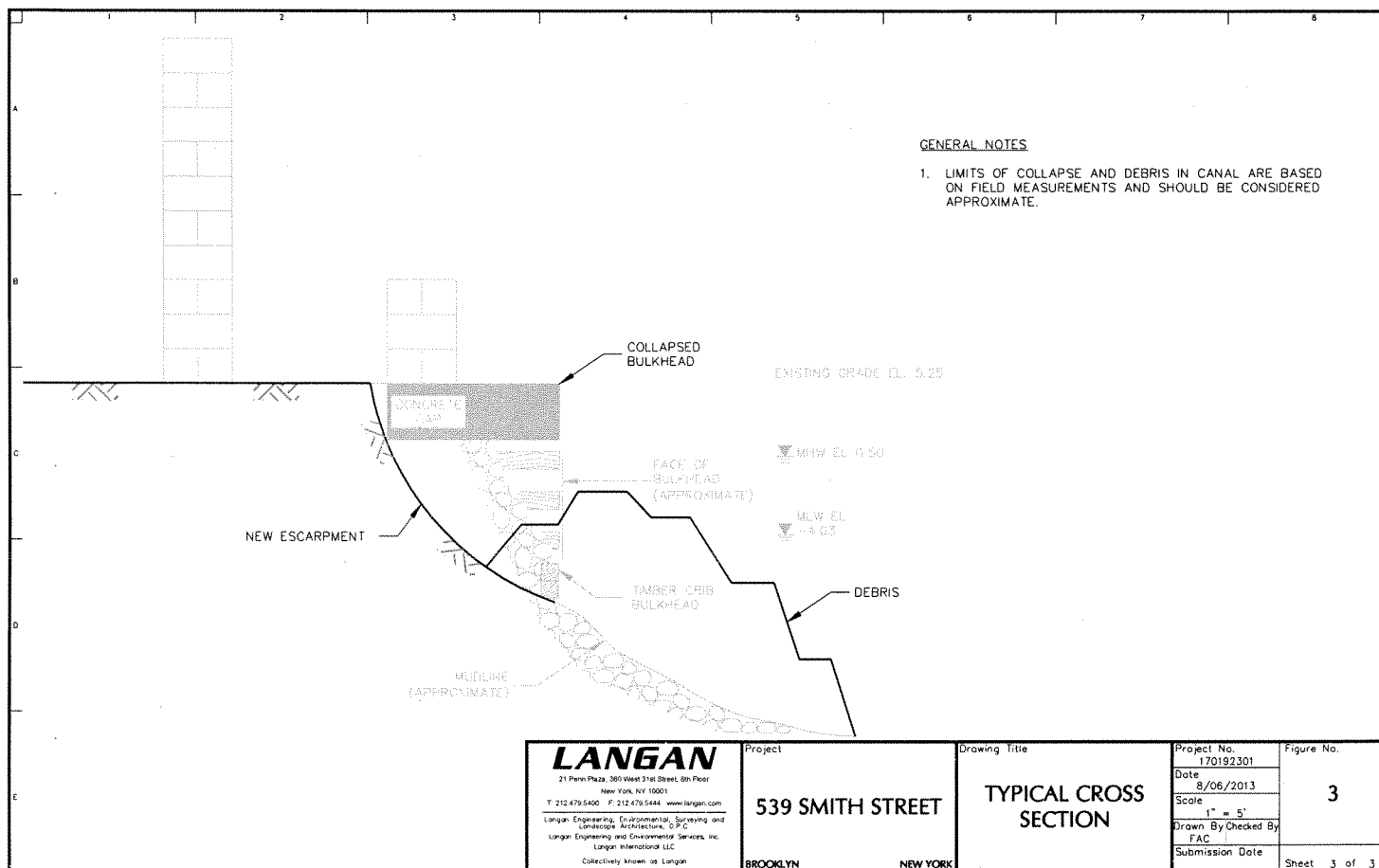
Figures



SOURCE: USGS JERSEY CITY AND BROOKLYN QUADRANGLE MAPS, 1968, PHOTOREVISED 1979.

LANGAN 21 Penn Plaza, 360 West 31st Street, 8th Floor New York, NY 10001 T: 212.479.5400 F: 212.479.5444 www.langan.com Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. Langan Engineering and Environmental Services, Inc. Langan International LLC Collectively known as Langan	Project	Drawing Title	Project No. 170192301	Figure No.	
	539 SMITH STREET BROOKLYN	SITE LOCATION MAP NEW YORK	Date 8/06/2013	1 Sheet 1 of 3	
			Scale NTS		
			Drawn By FAC		Checked By
			Submission Date		





Appendix A

Site Photographs



Photo 1: View of the collapse from Lowes parking lot across the canal.

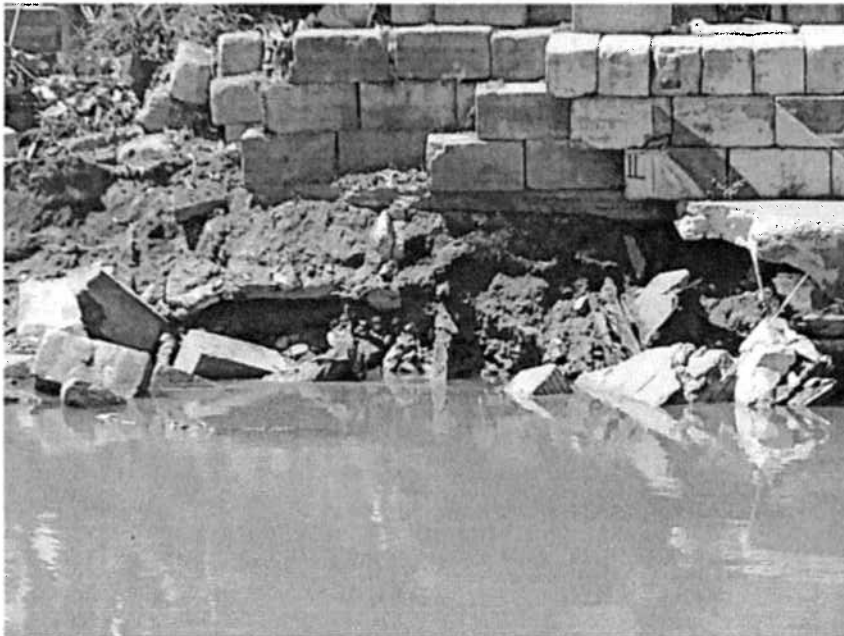


Photo 2: View of the northern end of the collapse from Lowes parking lot across the canal.

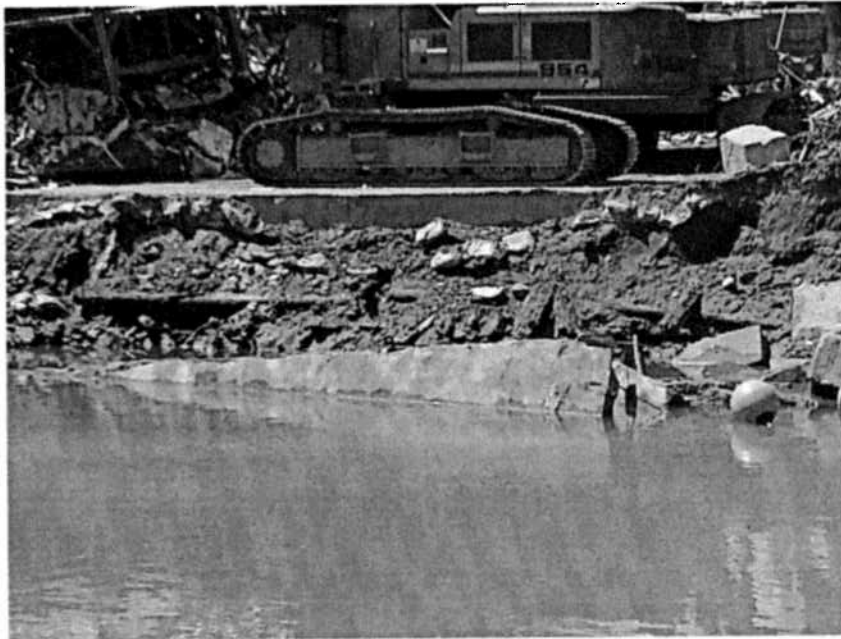


Photo 3: View of timber cribbing members in middle of collapse from Lowes parking lot across the canal.

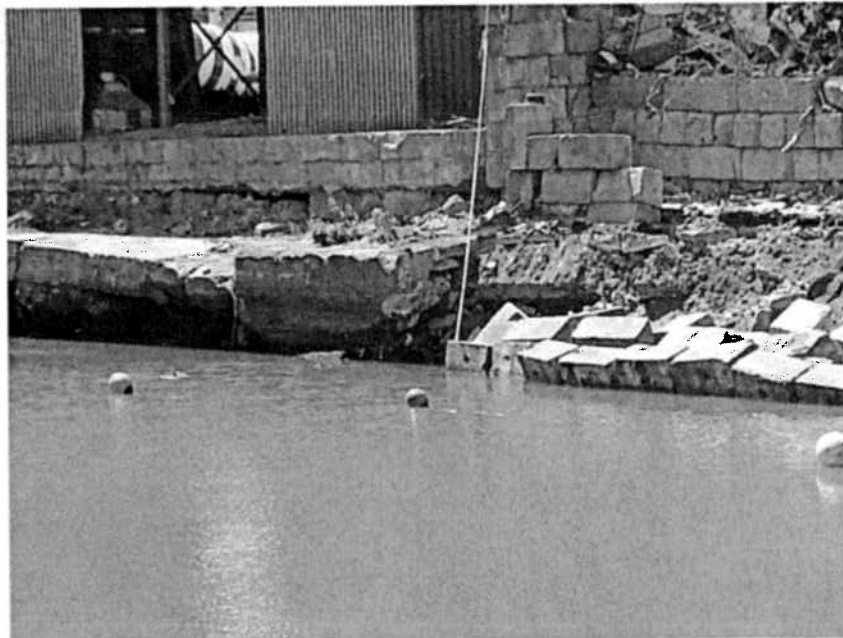


Photo 4: View of south end of collapse from Lowes parking lot across the canal.



Photo 5: View of the collapse from site, looking south.

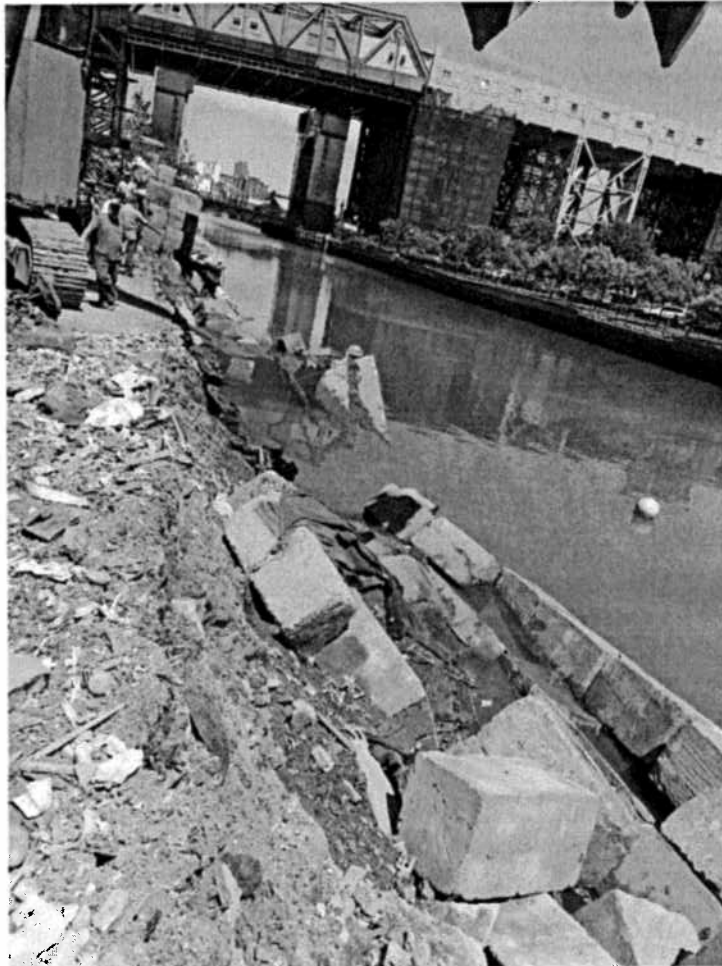


Photo 6: View of the collapse from site, looking north.



Photo 7: View of the south end of the collapse from site.



Photo 8: View of the north end of the collapse from site.



Photo 9: View of the middle of the collapse from site.



Photo 10: View of the timber cribbing members protruding from the escarpment looking east.



Photo 11: View of the timber cribbing members protruding from the escarpment looking south.

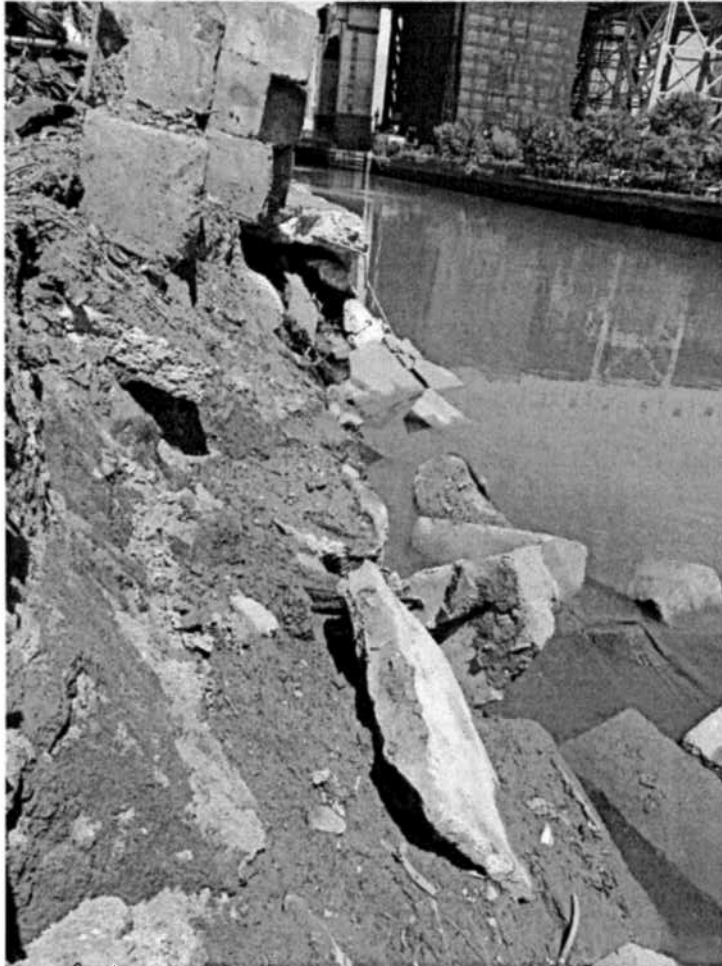


Photo 12: View of void beneath concrete cap at north end of the collapse.



Photo 13: View of the southern portion of the collapse from site, facing the canal.



Photo 14: View of the northern portion of the collapse from the site, facing the canal.



Photo 15: View of general area from the elevated F/G subway platform.

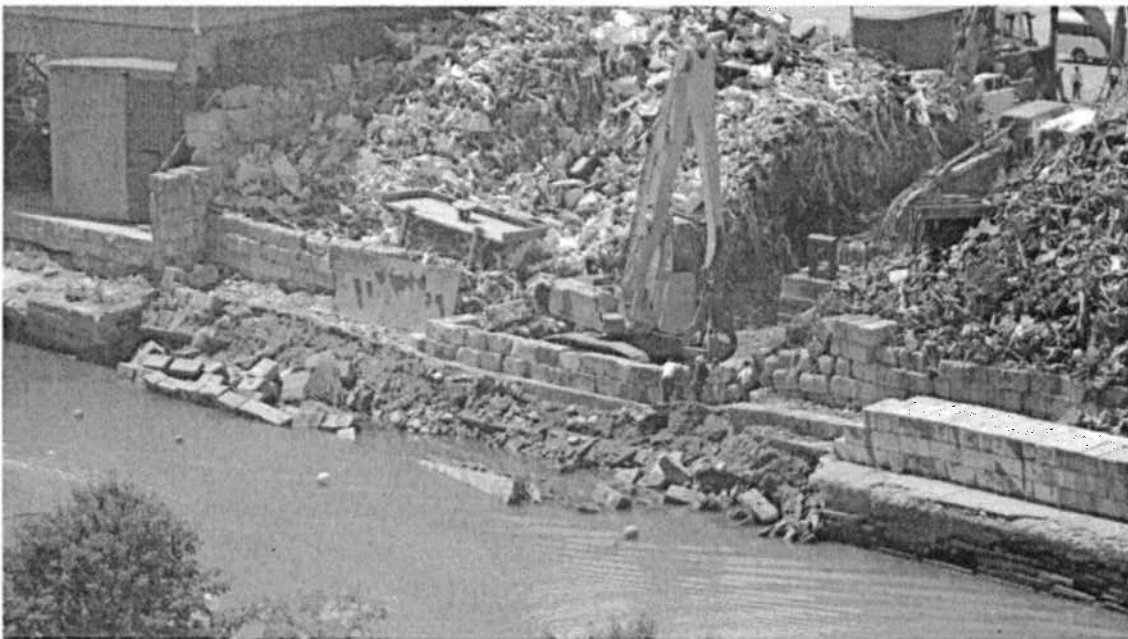


Photo 16: View of the collapse from the elevated F/G subway platform.

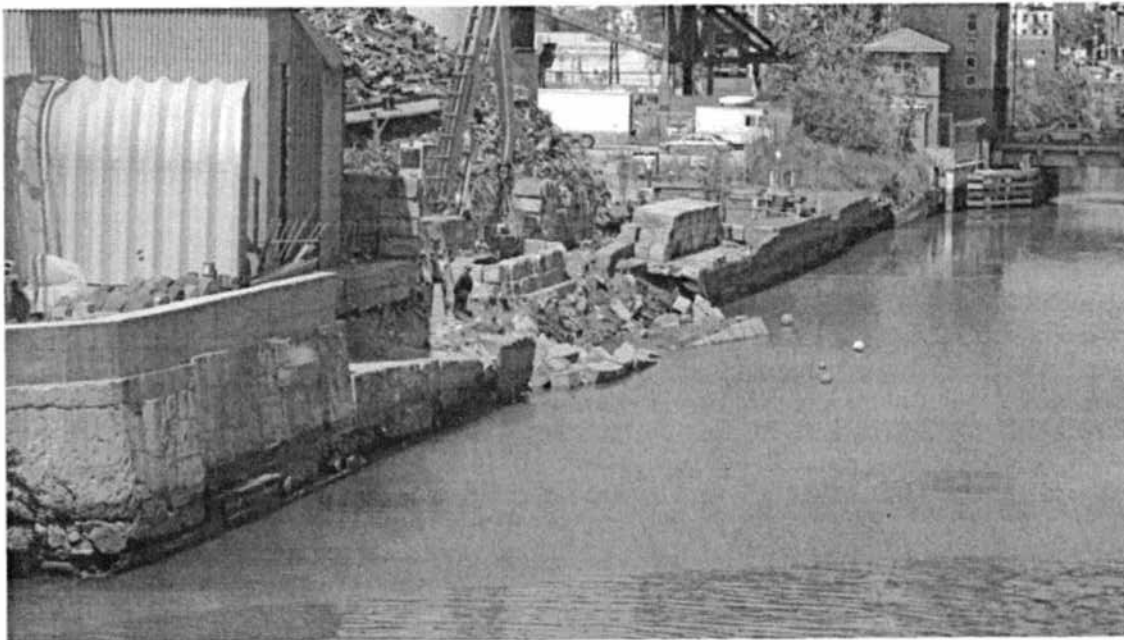


Photo 17: View of general area from the Hamilton Avenue bridge.



Photo 18: View of the collapse from the Hamilton Avenue bridge.

August 8, 2013

Mr. Kenneth Huber

Project Manager

Langan

Dear Mr. Huber,

We have reviewed your August 7, 2013, letter report regarding the collapse of the existing bulkhead into the Gowanus Canal. Based on your description and EPA's own assessment during a site visit in the morning of August 7, we have concluded that **immediate action** should be taken to remove the debris from the canal. Immediate action also should be taken to stabilize and secure the shoreline so as to prevent further collapse of the remaining concrete cap and northern portion of the bulkhead and other releases to the canal as a result of soil erosion.

EPA has reviewed the recommendations included in the aforementioned letter report and concurs with those recommendations. Accordingly, EPA authorizes you to proceed with the work immediately in the following sequence:

1. Install a turbidity curtain in the canal over the entire length of Benson Metal's bulkhead and around the collapsed debris in order to contain turbidity from eroded soils.
2. Submit a plan to EPA for the immediate stabilization of the shoreline including considerations of the weight impact (dead loads) of the remaining concrete cap and concrete walls and of the metal scrap heaps at the eastern end of the site.
3. Submit a plan to EPA for the removal and disposal of the collapsed debris from the canal and from the strip of shoreline outside the metal scrap retaining wall.
4. Submit a schedule for the sequential implementation of the above and the installation of a new bulkhead in accordance with the engineering specifications previously approved by EPA.
5. Installation of the turbidity curtain should take place immediately. The remaining work described above shall begin immediately following EPA's approval of the submitted plans.

EPA will coordinate efforts with the Region 2 office of the New York State DEC. To that effect, DEC's recommendations sent by e-mail on August 7 to Benson Metal's attorney and engineer are either included in the required actions above or, it is our understanding, they are already being implemented by Benson Metals.

EPA is revising the draft administrative order, which counsel for Benson had previously reviewed, to reflect the changed conditions. Although EPA and Benson had previously contemplated executing the order after coordinating advance agreement regarding the conditions for substantive compliance under the CERCLA permit exemption from the other government agencies, in view of the circumstances, EPA

believes that the order should be executed with such approval and concurrence to occur later. EPA will forward a revised draft to you and the other agencies which we hope to have executed next week.

Please, let me know if you have any questions. Thank you for your cooperation in the matter.

Sincerely,

Christos Tsiamis
Project Manager
New York Remediation Branch
USEPA Region 2
290 Broadway, 20th Floor
New York, NY 10007